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NOVEL USE FOR REFRIGERATION.

The big refrigerating plant recently completed at the Isabella furnaces of the United States Steel Corporation at Etna, Pa., was put in operation last week. The plant is the first of its kind to be built in this country, and its object is to remove all moisture from the air supplied to the blast furnaces.

BIG SALT PLANT BURNED.

The Michigan Manufacturing Company's salt and packing plant was totally destroyed by fire of unknown origin last Sunday, entailing a loss of about \$80,000. The Michigan Manufacturing Company is a Nelson Morris concern and furnished salt for the big packing establishments of the latter. The plant will probably be rebuilt at once.

ARMOUR GETS ARMY CONTRACT.

Contracts for supplying the army post at Fort Riley, Kan., for the next six months with fresh meat were last week let to Armour & Company, in competition with other bidders. The successful bid was \$5.92 per hundred pounds. The contract is the largest ever let at this post, and calls for 10,000 pounds of meat and upward per week.

HAMMOND ST. JOE PLANT RUNNING.

The South St. Joseph plant of the Hammond Packing Co., which burned last July, has been completely rebuilt, and slaughtering was resumed last week in all except the hog department, which is not quite ready for business. This will naturally give a powerful impetus to the market at this point. The new plant is thoroughly modern, equipped with the latest machinery, and will be operated by electricity.

KOCH THEORY IS DISPROVED.

Dispatches from London state that the Royal Commission appointed in August, 1901, to inquire into the relation between human and animal tuberculosis has arrived at a conclusion justifying the issuance of an interim report, according to which the commission finds that human and bovine tuberculosis are practically identical.

The commission states that exhaustive experiments proved the disease produced in animals by tuberculosis material, whether of human or of bovine origin, was identical both in its broad general features and in the finer histological details. The commission's records include the results of past examinations.

SUPREME COURT SUSTAINS GROUT LAW

The Supreme Court of the United States on Tuesday handed down the long-awaited decision on the constitutionality of the Grout oleomargarine tax law. The decision was in favor of the law, and is a severe blow to the oleomargarine industry. It sustains the legality of the prohibitory 10-cent tax and compels the payment of this tax on all colored oleo, whether the coloring matter be natural or not.

Though the decision sustained the odious Grout law, it was nevertheless a moral victory for the oleo industry. In his opinion Justice White, who rendered the decision, declared that though the action of Congress in imposing this repressive tax might be destructive to a lawful and proper industry, yet it was not within the province of the Supreme Court to interfere with the legal authority of Congress. The law-making body had the power to impose the tax, and it was the duty of the judiciary to uphold Congress when the latter did not exceed its power.

The court was by no means unanimous in sustaining the law. Chief Justice Fuller and Justices Brown and Peckham dissented vigorously from the views of the majority of the court, and as in the famous railroad merger case, it became evident that the highest court in the land was divided against itself, the believers in the Grout law outvoting by a narrow majority those who considered it unfair and oppressive.

The decision was rendered in the case of Leo W. McRay, of Cleveland, O., who sued the United States to recover \$50 paid by him as a penalty for the sale of a fifty-pound package of colored oleomargarine bearing a tax stamp of three-quarters of a cent a pound instead of ten cents a pound. McRay's counsel argued first that, although the oleo was colored to look like butter, the color was obtained by

the use of butter, which was itself artificially colored, but the use of which as an ingredient in the manufacture of oleo was authorized by law; and, second, that the tax of ten cents a pound was prohibitive and confiscatory, and an attempted Federal usurpation of the police powers of the States.

The court ruled that the tax contemplated the finished product and not the details of manufacture. If the oleo was colored it should pay the higher tax, and if uncolored the lower tax, regardless of how obtained. The court said that although the effect of the tax was to repress the manufacture of artificially colored oleomargarine, it could not be said that such repression destroyed rights which no free government could destroy, and therefore no ground existed to sustain the proposition that the judiciary might invoke an implied prohibition upon the theory that to do so was essential to save such rights from destruction.

It was evidently the intention of Congress to repress the manufacture of colored oleomargarine, and it was the duty of the judiciary to uphold Congress when the latter did not exceed its power. The abuse of power was not to be corrected by the bold usurpation of power by the judiciary.

As to the amount of the tax, the court said it was settled that the court could not consider the amount of any tax fixed by Congress, this being a purely political function.

The court also upheld the validity of the law in the cases of Schy and Broadwell, appealed from Chicago. In these cases the court, in an opinion by Justice Brewer, held that the fact that in the trial of their cases the defendants waived the right of trial by jury did not invalidate the verdict, which was against them.

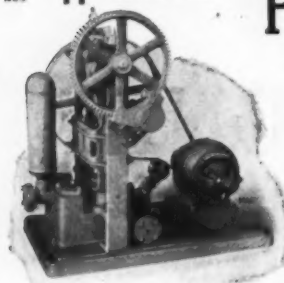
DEADLOCK OVER MEAT INSPECTOR.

Mayor Neff, of Kansas City, who, as editor of the Kansas City Drovers' Telegram, ought to know something about meat conditions, has been having a hard time appointing a meat inspector for the city. Political opponents in the City Council have refused to confirm any one of a dozen appointments he has made for the office, and in the meantime meat is sold all over the city without inspection. Fortunately, most of Kansas City's meat comes fresh from the abattoirs of the big packers, where slaughter and inspection methods are perfect.

SUICIDE OF ARMOUR MANAGER.

C. L. Saylor, office manager for the Armour Packing Company, at South Omaha, committed suicide on Thursday by shooting himself through the head. The act was committed an hour before the time set for Mr. Saylor's departure for an Ohio sanitarium, where he was going for treatment for nervous prostration, said to have been the result of overwork. His son, while walking through the park, discovered his father lying near a path dead. Saylor was prominent in business and professional clubs and was one of the most popular of the Armour staff.

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OIL MILL SUPERINTENDENTS MEET

(Special to The National Provisioner.)

Houston, Texas, June 3.—The eleventh annual convention of the Oil Mill Superintendents' Association began its sessions in this city on Wednesday. The meeting is proving to be one of the most successful in the history of the association. The attendance has broken all previous records, and there are more than one hundred members present, including many of the leading oil mill superintendents and experts of the country.

The greatest interest is being taken in all the proceedings. Topics discussed cover comprehensively the whole oil mill field, and the committee has secured some very able papers by various experts, the reading of which is followed by animated discussion on all mooted subjects. The social features of the gathering are notable, as usual, and the visitors are being generously entertained by the local hosts, and the association officers have not overlooked a single detail which would tend to the success of the convention or the pleasure and profit of the attending members.

At the opening session on Wednesday the roll call showed the largest attendance in the history of the organization. President H. J. Thiessen called the convention to order at 10 o'clock, and proceedings opened with a prayer by Rev. Mr. Buchanan. The address of welcome was delivered on behalf of the city of Houston by city secretary Lipper,

who spoke of the pleasure it gave the city to entertain so important a body of men, representing an industry so vital to the welfare of the State and of the entire South. The reply to the address was made by John Sweeney, who happily expressed the appreciation of the delegates for the courtesy and hospitality shown in the greeting and entertainment.

The first day's programme included the reading of several important papers. S. D. Henley, of Scranton, Pa., addressed the convention on the subject of "Technical Education," and his scholarly discussion of the general subject was listened to with close interest. A summary of Mr. Henley's address appears further along in this report.

"The Value of the Cottonseed Industry to the South" was the title of another very interesting address, by H. E. Harman, the well-known cottonseed oil authority, of Atlanta, Ga. This address appears in full on another page. Papers were also read on Wednesday by C. W. Thatcher, Wills Point, Tex., on "Belts," and by J. F. Folliard, Paris, Tex., on "Fuel."

The sessions continued Thursday and Friday and many valuable papers were presented and discussed. J. P. Bass, of Bryan, Texas, had for his subject, "Time Allowed for Press to Go Up, and Its Effect on Press Cloth." William Bauer, of Burton, Texas,

discussed, "The Duty of the Crushing Rolls, and Their Relation to the Yield of Oil." Both will be found in full in this issue.

Other topics on the programme, with those assigned to discuss them, were as follows:

"Belts," Thos. Bell, Tyler, Texas; C. W. Thatcher, Wills Point, Texas; "The Proper Care of Belts During the Summer," B. C. Newberry, Blossom, Texas; "Friction and Lubrication in Oil Mills," George C. Hascall, Fort Worth, Texas; "The Use of the Filter-Press for Crude Oil," H. J. Thiessen, Sherman, Texas; A. A. Diffey, Kaufman, Texas; "Fertilizer and the Oil Mill," W. B. Bradshaw, Ennis, Texas; John H. Green, Barlow, Miss.; "The Heart of the Oil Mill," Edwin Tehman Johnson, Memphis, Tenn.; "The Importance of the Chemical Test for Cake and Oil," R. H. Schumacher, Navasota, Texas; "What Relation Does the Linter Bear to the Huller and Separator?" John Sweeney, Houston, Texas; H. Wunderlich, Waco, Texas; "Industry, Sobriety and Economy," George T. Parkhouse, Cisco, Texas; "The Importance of Cleaning Seed," J. W. Roberts, Fort Smith, Ark.; John Drake, New Boston, Texas; "Theory and Practice of Working Meal," G. A. Baumgarten, Schulenburg, Texas; J. B. Hensley, Beeville, Texas; "Trials and Tribulations of a Traveling Man," S. L. Dickey, Dallas, Texas.

VALUE OF THE COTTONSEED OIL INDUSTRY TO THE SOUTH

By H. E. Harman, Atlanta, Ga.

For more than seventy years after cotton had become the most important agricultural product of the South, its seed was a waste product, whose effective disposition defied the ingenuity of both farmer and ginner. Two-thirds, by weight, of the wonderful cotton plant's contribution to man's necessities was utterly lost through ignorance of its value.

When German chemists began to utilize the coal tar refuse of gas works and to produce wonderful aniline dyes, artificial perfumes and marvellous medicinal preparations therefrom, the world stood amazed. Right here in our own Southland has been wrought a transformation far more wonderful and important in its effects on agriculture and industry. The development of cottonseed from a waste product into an article of world-wide demand is an industrial feat which has never been surpassed.

Being higher favored by nature than other sections, the South has been more prodigal with her resources. Waste run rampant was characteristic of the agricultural South. Tim-

ber resources sufficient to house the nation for a thousand years have been exhausted in riotous waste. These can never be replaced in any important degree, no matter what scheme of reforestation may be adopted and successfully applied. Our cottonseed resources, fortunately, are differently arranged. The waste of an hundred years can never be remedied, but future generations are cheated of no tangible part of their inheritance by the prodigality of their fathers. The plant is an annual and the waste is now a thing of the past.

The old country ginny with its horse-power appliances is forever gone. The vast piles of rotting cottonseed which were always in evidence around the gin-house are also gone, the one not more surely than the other. Our statute books are yet burdened with laws prohibiting ginner from throwing cottonseed in navigable or fishing streams, but the necessity for these laws has long since passed. It is yet illegal for a ginner to leave cottonseed where his neighbor's cattle may eat to their hurt,

but the ginner who does it is a candidate for the asylum and not the jail. These old laws are monuments to the wasteful practices of the old agricultural South, which yearly destroyed millions of dollars' worth of valuable products.

Until one knows the season's crush of each oil mill in the country and the average price paid for seed, the amount of money paid to farmers for raw material will remain an unknown quantity. Stated approximately, the mills put into the hands of cotton growers at least \$40,000,000 this season. This is the first benefit the oil mill bestows upon the section wherein it is located. For a product which, without the oil mill, would be of no money value, this showing is not to be despised.

The money yearly paid to cotton growers by oil mills produces an effect altogether out of proportion to the amount. It comes at a time, generally, when the planter stands in great need of money. It enables him to provide for his immediate necessities and to hold his cot-

ton for a better price if he so desire. When cotton was lower in price than it has been this year the price paid for seed represented a large portion of the planter's profit on his cotton crop. It has enabled many a man to make both ends meet, when without a market for seed his year's operations would have shown a loss.

In this paper it is not intended to go into statistical details. It is more of an economic study of the broad effects produced upon an entire section by one of its leading manufacturing industries. The oil mills are naturally located in the South, and their primary effect is exerted upon their own section. Our cotton goes to every civilized country under heaven, and in its preparation for human use the laborers of an hundred textile districts find their livelihood. Cottonseed is manufactured into its various products in our own country, and the centralization of its manufacture in the South proper seems to be only a question of time.

The oil mill is doing more to develop the South along industrial lines than any other one factor. In many towns the crusher has been the first manufacturer, the first man to market a finished product and to bring foreign money into local channels of trade. The operation of the oil mill has turned the attention of many people to the advantages possessed by their towns for other industries. Around the oil mill in many instances have arisen other industries, which give employment to labor and help make the town self-supporting. The oil mill is a nucleus around which have been built knitting mills, fertilizer works, ice plants, spinning mills and other industries. It has exerted a wholesome effect along every industrial line, and has been the means of attracting other capital to the South. In the State of Texas alone some \$10,000,000 has recently been invested by Chicago packing interests, who were attracted to the State solely by the presence of the oil mills.

What Cattle Industry Owes.

The cattle industry, which yearly becomes more important in the South, owes much to the crusher. With the passing of the open range the cattle industry would have languished but for the supplies afforded by the oil mill. It is a safe prediction that the South is the coming cattle country. The presence of the oil mills makes this possible. The diminution of the supply of natural food makes it imperative that cattle be fed as near the source of artificial food supply as possible. The South has other resources in this line, but the oil mill is the chief factor.

But for the fertilizing properties of cottonseed meal and the wonderful growth of the fertilizer industry, largely due to that fact, the Southeast would have ceased to be a factor in the production of cotton. The majority of our lands are worn and practically exhausted. Without some cheap supply of plant food the farmers in the older cotton States would have fallen sadly behind. The return to the soil of

the fertilizing properties of the cottonseed makes it possible to grow profitable crops on land otherwise practically valueless.

The greatest benefit wrought upon the South by the oil mill is doubtless found in this particular feature. With the manufacturers of cotton goods throughout the entire world crying strenuously for more cotton it is necessary that the demand be supplied as fully as possible. Without the use of commercial fertilizers the Southeast would not be a factor in the production of cotton to a marked extent. Right at the farm, however, is to be found the greatest supply of nitrogenous plant food. The oil mill takes the cottonseed and extracts from it the oil which has no fertilizing value. To the soil may then be returned the meal, which is a splendid strengthener of exhausted fields. One may say that the oil mill makes the cotton crop possible, and did the crushers do nothing else for this section, this alone makes the industry invaluable to the South.

An Infant Industry.

The manufacture of cottonseed products is yet in its infancy, comparatively speaking. It is a growth of but few years, and has been thus far carried on in a wasteful manner. There is vast room for improvement in manufacturing methods. The effort has been to get mills in place to put the seed through the first processes of manufacture. The industry is only now turning to improving the wasteful methods of the past. In the light of modern methods crushing is not now done in an economical manner. There is too much waste and the crusher is the sufferer. There are latent possibilities yet in the cottonseed, and when the utmost value is found and utilized the South will be the gainer by getting more and varied industries.

When the crusher escapes from the unjust domination of the dairy interests of the West the full value of the industry to the South will be materially enhanced. At present his most valuable product is discriminated against by law. Between this oil and the natural demand for it stands an iniquitous legislative enactment obtained under false pretences. Such a condition cannot long endure the test of time. When it is finally removed our great industry will grow by leaps and bounds. Until this good day come it is necessarily hampered and confined.

Summarizing briefly the value of the oil mill to the South, it may be said that the crusher makes the cotton crop possible in a large territory of the cotton belt; he utilizes an otherwise waste product and enables the producer to secure the best results from the main crop; he gives profitable employment to labor, and brings to his section valuable collateral industries which mean much for its progress and growth. The value of this, the South's most important and characteristic industry, cannot be estimated in dollars and cents.

DUTY OF THE CRUSHING ROLLS AND THEIR RELATION TO THE YIELD OF OIL

By Wm. Bauer.

The duty of the crushing rolls and their relation to the yield of oil is the subject assigned me, on which to prepare a paper for this convention. Being a writer of limited ability, and having members in this association who are considerably more experienced and certainly more able to dwell on this subject than I am, I cannot come to any other conclusion but that our worthy president assigned me the task as a source of amusement for this assembly, evidently being familiar with the old proverb, "No fools, no fun." Nevertheless, I will do my best to deceive him.

The crushing of the cottonseed kernel, better known to oil mill men as "meats," in order to make them readily yield their oil, is a weighty factor in properly conducted oil milling. The duty performed by the crushing

rolls must have the careful attention of the superintendent to insure thorough disintegration at all times.

In construction, the crushing rolls do not differ materially in all cases, consisting of a number of heavy steel rollers, with case-hardened surface, placed in a vertical rack in perfect alignment one over another. While some makes differ from others in their driving gear and diameter of rollers, yet all manufacturers bear one point in mind in designing their rolls, and that is to proportion them so that under certain conditions they destroy all the minute oil cells of which the kernels are made up in part.

In this instance the conditions signify a volume, as it pertains strictly to the manner in which the rolls are handled; in other words, the skill exercised by the superintendent.

Following are a number of conditions from which, if rolls are run as such, good results cannot be expected:

First—In proper distribution of the feed. By this means the meats are allowed to be fed into the rolls in a solid stream, coming in contact with only a certain part of the rollers, probably being only about one-fourth the length of the first. While in their descent they will be partially spread, but at best only about one-half the total contact of the rolls is brought to bear on the meats. It will be readily seen that the rolls have been robbed of their capacity, and consequently improper disintegration results.

Second—Improper alignment. This is an abuse to which rolls are frequently subjected, which is brought about by wearing of the metal and the journals, in some instances the metal melting out. Rolls getting out of line are sure to lay at an angle to one another, and this being the case, insures a poor or no contact at some parts of the rollers.

Third—Wearing or hollowing out of rolls. This usually takes place where the bulk of the meats are fed into the rolls, thus causing a groove to wear or to hollow out, and allowing the meats to pass through them without bringing the total pressure or weight of the rollers to bear. This evil should be remedied at all hazards in order to procure a perfect contact, which at all times is indispensable to secure proper results.

Fourth—Overloading. This is another of the many faults to which rolls are subject, but this is usually not the direct fault of the superintendent, although it may in some instances be corrected by speeding the rolls up, but not to exceed a practical limit, from 160 to 220 revolutions per minute. Otherwise, especially so where rolls are run at a differential speed, considerable trouble will be experienced from heating caused by increased friction, and the rolls will be gummed.

Better Results at Different Speed.

Furthermore, in this connection I will say that where rolls are run at a differential speed they will produce better results than where they are run at like speed, for the reason that the meats run through like speed rolls are only pressed or flattened out in a similar manner as you would a pie crust, while when run through a differential speed, the meats would not only be pressed, but torn into the smallest of particles, completely destroying the make-up of the kernel and preparing them as they should be, to produce the very best results. Meats turned out in a flaky condition, when subject to the rotary motion of the heater sweeps, have a tendency to roll or ball up; in other words, are the source of "water balls," as they are commonly termed, which is a menace to the art of cooking, and result in a reduced yield of oil, an inferior quality of cake and an unnecessary large presscloth expense. In some instances mills have provided themselves with a heater, through which they run their meats, thoroughly pulverizing them, and to a great extent eliminating the water ball nuisance.

I have a heater of my own construction in our mill, and if permitted will familiarize you with the details of it. Taking a 5-foot length of 6-inch conveyor, I riveted spikes made of 5-16-inch iron to the flights at intervals of every 6 inches, same projecting about 4½ inches. The conveyor, or drum, is next bolted to a shaft and properly balanced. It is then encased in a box, through which the shaft extends, and is supported on bearings fastened to the end of the box, and is run at a speed of 500 revolutions. This makes a cheaper and more rigid heater than where a wooden drum is used.

An idea striking me quite forcibly, which would probably further the art of thorough disintegration, is to pass the meats through a steam jacket conveyor or some receptacle of like order. Thus, by heating, you expand the oil cells, so as to somewhat soften the meats and consequently easily crush them. This only being an idea of mine, I am not prepared to state any facts, but there may probably be members among us who have had experience with a contrivance based along this line.

TIME ALLOWED FOR PRESS TO GO UP

ITS EFFECT ON PRESS CLOTH.

By J. P. Bass.

The subject assigned to me is one of very much importance, and should have the attention of every superintendent who expects to operate an oil mill successfully and economically. It is one that I feel hardly able to do justice to. Economy is one of our watchwords, and in operating our presses we should use that care and give to them that attention that would result in economy by saving the press cloth, as well as guarding against injury to the presses. We all may differ in some particular respects as to the time allowed for the presses to go up, and its effect on press cloth; so I can only give to you the results of my own experience.

I set my low-pressure pump so that it will carry the pressure up as quickly as can be done without doing injury to the pump, and will automatically stop work when the pressure reaches five hundred. At that pressure the oil begins to flow from the cake, and the high-pressure pump has already begun to work the pressure on up, and slowly carries it up to 3,500 or 4,000 pounds, as the case may be. I set my high-pressure pump at 3,500 pounds, though I have seen others use 4,000.

My idea is to get the pressure at work on the cake as soon as possible after the press is filled; therefore I run my low-pressure pump as rapidly as practicable to take up the space in the presses and let the pressure begin to come on the cake as quickly as possible, but let the high pressure come on very slowly without ceasing. Never check or release the pressure after it has begun to come on the cake, as you will lose a large per cent. of oil by so do-

ing, but see that your high-pressure pump works the pressure up slowly until it has reached the amount of pressure that it is your custom to use.

I do not think it advisable to run the pressure up too quickly, as it will, in most cases, do damage to the press cloth, by causing the oil to burst through in too large a volume. Not giving the cake time to compress, the meal is liable to burst or break the cloth under the sudden strain of rapid pressure, especially if there is much moisture in the meal. Another objection to rapid pressure is that it will cause the meal to squeeze or press out of the boxes, causing the loss of time and labor in keeping the presses clean, and also a per cent. of oil is lost by having to work over again these cleanings from the presses.

Our attention here is again called to the proper cooking of the meal. The condition of the meal when cooked has a great deal to do with the effect of the pressure on the press cloth. Let us not forget this all important principle of the process of making oil—cooking the meal properly. We cannot give too much attention to it.

In conclusion, I will say that when your press is filled, put your low-pressure pump, or accumulator, to work immediately, take up the space in the boxes as quickly as possible, not letting the low pressure exceed 500 pounds; your high-pressure pump slowly but regularly, carrying the pressure up to the amount desired in from three to five minutes. I think this method will result in but little damage to the press cloth if the condition of the meal is favorable.

ADVANTAGES OF TECHNICAL EDUCATION

By S. D. Henley, Scranton, Pa.

When requested to read a paper on the subject of "Technical Education," I hesitated to do so, for the reason that the subject is so important and its scope so broad that it would be impossible to more than mention the important phases of this very important subject in the time allotted to me. Education has no value that may be measured by figures or computed in gold. Value, if you can, sight to the blind, speech to the speechless, or hearing to the deaf, and then you may place a value on education. Estimate the value, if you can, of heaven's dew to earthly verdure; of heaven's rains to thirsting soils; of the sun's general warmth to growing harvest; and then you may know something of education's worth and power. It expels darkness, generates and refines civilization. It is the security of society, the mother of invention and the guarantee of law.

Not alone in the exercise of civic rights, but in the pursuit of success in life's bitter struggles education is an essential qualification. Education will do many things for you, if you are made of the right stuff. You cannot fasten a two thousand-dollar education on a fifty-cent boy and expect it to stay. The fop, the dude and the shirk will come out of the best institutions about as they went in. Institutions of learning will not do every thing for you; they are a means by which you can win your way to success in life. Another thing which must not be forgotten is that an education is not a scheme to enable a man to live without work. Its purpose is to help him to work to advantage, to make every stroke count. In every field it is always science that wins. Brain work is higher than hand work and is worth more in any market. The man with the capable mind is the one who directs, and he receives more compensation than those whose work he directs. Look over this matter carefully, for it is important.

Go for your education to that school, in whatsoever state and country, under whatever name and control, that will serve your purpose best, and that will give you the best returns for the money you are able to spend. When you are in the serious duties of life, let your own work and your own influence be the

strongest plea for a higher education for the coming generation.

The defect in our modern education is that not what knowledge is of most real worth is the consideration, but what will bring most applause, honor, respect—what will most conduce social position and influence—what will be most imposing. As through life not what we are, but what we shall be thought of, is the question; so in education the question is not the intrinsic value of knowledge so much as the intrinsic effect on others. This being our dominant idea, direct utility is scarcely more regarded than by the barbarian when filling his teeth or the fop of to-day when having photographs transferred to his nails. Had we time to master all subjects we need not be so particular what we take up first, but we who have only span-long lives must bear in mind our limited time for acquisition, and employ what time we have to the greatest advantage.

Technical Education Defined.

What is technical education? It may be viewed from a two-fold standpoint. First, in the light of manual training; second, in that of theoretical education in sciences treating of the facts and principles of the engineering professions and the use of drawing, which is the language of mechanical design and artistic ideas. It is our intention to deal principally with the latter phase of this subject, which may be subdivided as follows:

First. Of what does technical education consist? Second. Technical education as a preventive of idleness, poverty and crime. Third. The present urgent need of technical education in America. Fourth. The value of drawing, exact measurements, applied mechanics and engineering. Fifth. The value of technical education to the individual. Sixth. The result of this technical education. Seventh. How this education may be obtained by the mass of wage-earners.

Technical or industrial education makes every man and woman a successful producer, places them above fear of want and gives them hope of increasing prosperity as they advance in life. It is the individual's equipment, the family's protection, and the nation's

safeguard. Upon it rests the welfare of the masses, the security of citizenship, the progress of civilization itself. No subject of more vital interest to our age and country can be presented for consideration. A perfect civilization is a society of specialists. Without technical education a society of specialists is an impossibility. Give every man a fitting education for a definite purpose and build society on a foundation irremovable and enduring, you give aim and purpose to life, strength to character and vitality to state; you remove idleness, you decrease inefficiency, you prevent crime.

Playfair's definition of technical education was "That those who are engaged in any industry should have a trained intelligence and understanding of the special industries which they enter." The object of technical education is to teach the actual method of working some particular trade to persons engaged or about to be engaged in that trade. This method is to be taught in a scientific way, theoretically rather than practically. Where practical work could be introduced to test the theory, the instruction would be more accurate and profitable. A few persons still hold that unless some practical manual work is done the instruction is not really technical. This is too restricted a view, and is held only by a very few educators. However, it is the essence of technical education to teach the theory of a trade, illustrating it by practical work, that the person may be both theoretically and practically familiar with the business he intends to follow. The object of education being to prepare persons for useful and successful work, our present system of education needs broadening and strengthening to secure, not alone for the young, but for those of maturer years, instruction on the lines of technical education. Great advances have in recent years been made in this direction.

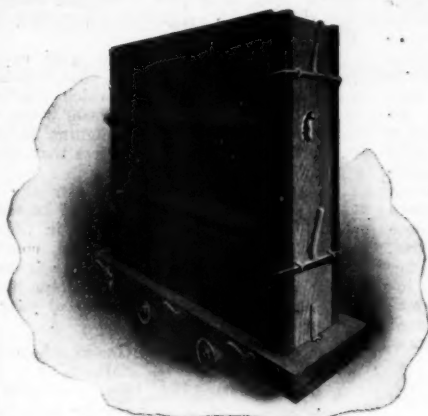
Technical education has been proven as a preventive of idleness, poverty and crime, which follow each other in rapid succession. Intelligent labor is the cheapest, as well as the most efficient protection of society and the mainstay of law and order. Securing ample and respectable means of subsistence, it effectually removes inducements to idleness and vice. It is an old proverb that idleness leads to poverty and often to crime. A good workman is usually a good citizen. We seldom hear of a skilled mechanic committing crime. Eighty-five per cent. of the convicts in the penal institutions of the United States have never learned any trade, nor had they any definite occupation before their conviction for crime.

Need Is Very Apparent.

The present urgent need of technical education is very apparent. Our newly acquired possessions have added enormously not only to our responsibilities but to our opportunities. Technical education is the key to American supremacy in the keen commercial, industrial and political rivalries of the great nations of the world.

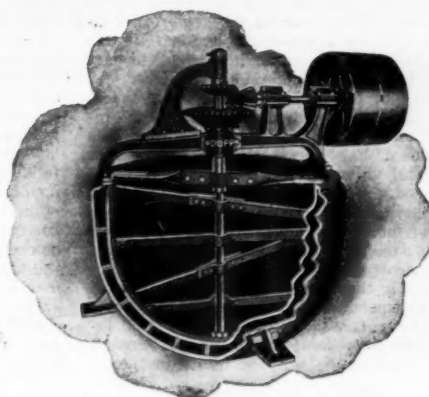
Drawing is the one study which lies at the basis of all constructive arts, and which should indeed be made a branch of all our systems of public instruction. Its importance as a branch of industrial education is very great. Drawing should be taught early in school life because it is following the rational method of beginning at the beginning and it should never lose its place at the head of the programme. When the art of drawing shall be permanently established in all the public schools, the cause of industrial education will be solidly advanced. Drawing is the certain means of progress in all the useful arts of life. This question of whether pupils in our public schools should be instructed in drawing could be easily settled if we would only consider that the greatest number of our children are to be the workmen of the future and that the methods of teaching them should be shaped in accordance with their destiny.

The fact that applied mathematics is an essential part of all our engineering courses requires the student to master a kind and amount of mathematics which he would otherwise have no thought of taking. One of the most evident considerations which



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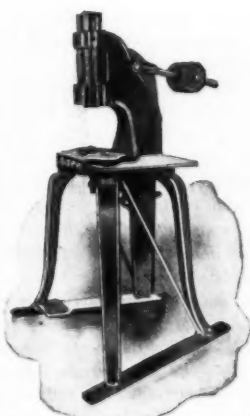
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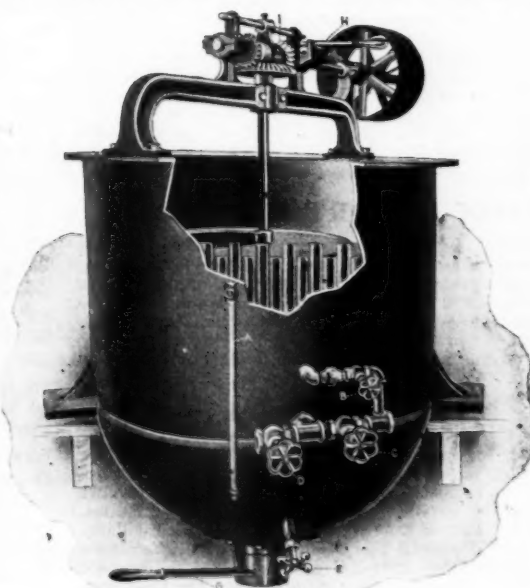


Machinery

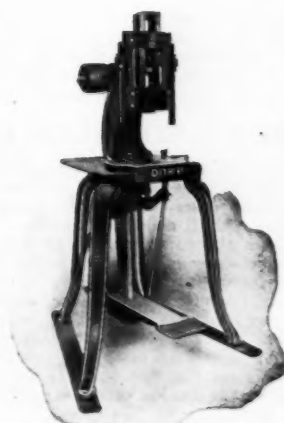
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comes to our attention in regard to this study is the limited foothold mathematics had in this country until its study in connection with its applications lent vitality to it, and in fact made it an indispensable part of the outfit of the professional engineer.

Because of the establishment of technical schools the study of mathematics has increased many fold. It is evident that this enlargement has necessarily multiplied its educational value simply from the fact it is more used. The designing of bridges and other engineering structures, of steam engines, of hoisting apparatus, pumping machinery, dynamos and motors, rolling mills, oil mills, cotton mills and packinghouses, together with the ever-increasing demands of public transportation, and its protean requirements, have constantly called for and rewarded the increasing mathematical knowledge brought to the solution of its problems.

Value to the Individual.

The value of this technical education to the individual cannot be overestimated. What we term technical education is that kind of training which will make the new generation of Americans excel the new generation of foreigners in the rivalry of race and nation. Americans live in the midst of an energetic rivalry of nations. The aim of our national life should be to do the work of the world better, more ably, more honestly, more skillfully, and less wastefully than the skilled men of other countries. If we are less skilled or less honest than others we are beaten in the race of life. It is therefore necessary that the young men who are to do the work of America shall in their own special profession, occupation, trade or calling know more thoroughly its fundamental principles, wield more adroitly its special weapons, be able to apply more skillfully its refined artifices, and to achieve more quickly, perfectly and economically the aims of life, whether it be commerce, manufactures, agriculture, navigation or architecture.

Our school and college curricula are too exclusively literary to meet the needs of the working masses. We have only made a beginning in the building up that great system of industrial training which we must have if we are to survive in the industrial rivalry of nations. Best technical education teaches the individual citizen what is best to do for a living.

Good results are brought about by technical education because it gives the student a definite purpose and the ability to concentrate all his energies on one thing. Some

sailors can splice a rope in many different ways. An American sailor knows only one way, that is the best way. It is the sharp-edged man, the man of single and intense purpose, the man of one idea, who turns neither to the right nor to the left, though a Klondike tempts him, he cuts his way through obstacles and forges to the front. He knows what he wants to do and does it.

Versatile men, universal geniuses and good fellows, are usually weak because they have no power to concentrate their talents on one point. This makes all the difference between success and failure. Such definite purpose has given to the world the printing press, the steam engine, the cotton gin, the sewing machine, the telegraph and telephone, together with the thousands of modern machines and appliances which form a large part of every well-equipped shop or establishment and every modern home. Such results were only developed through technically trained men and modern business methods. The resources of our country are indeed great, and all we need to do is to understand their relative values and utilize them with profit. This necessary technical education can be obtained by making a part of our present school system manual training, and thus fitting our boys for their places in life. Every city should be equipped with an up-to-date manual training school with a competent corps of instructors.

Grasp Every Opportunity.

Those of us who have been compelled to leave school without such technical training must take advantage of the opportunity afforded us in course of home study offered at the present time by reliable institutions. No matter what your position may be, you must thoroughly understand your work to get the best out of it either in profit or salary and the rapid advancement of all industrial methods, keeps you constantly on the alert for new ideas and better methods of improving your product, increasing your output, or reducing your cost of production.

Take advantage of every opportunity offered you for gaining knowledge, profit by the experience of others, read technical papers and books if engaged in industrial or commercial enterprises, pursue some course of instruction along the line of your peculiar ability, develop those talents with which you are gifted, remembering that a definite purpose and constant effort will overcome or surmount all difficulties, and in the end you will come out successful, which is our purpose in life.

OUR ENORMOUS COTTON EXPORT PRODUCTS

Cotton and its products will bring more than 400 million dollars into the United States from other parts of the world in the fiscal year which ends with the next month. Last year the total exports of cotton and its products amounted to 376 million dollars, and a statement just issued by the Department of Commerce and Labor through its Bureau of Statistics shows that in raw cotton alone the total for the present year exceeds the figures of last year by nearly 50 million dollars, thus indicating that the grand total of cotton and its products exported will exceed 400 million dollars in value.

The products of cotton other than the raw cotton fiber which go to form this enormous total, far exceeding in value that of any other single crop exported, are cottonseed oil, cottonseed meal, cotton waste, cottonseed in the natural state, and cotton manufactures. In cottonseed oil and cottonseed meal the growth in exports during recent years has been very great, and their exports now amount to more than 25 million dollars annually, while but a comparatively short time ago the cottonseed from which they are manufactured was considered valueless. The value of cottonseed oil exported from the United States last year was over 14 million dollars. In the present year the figure falls somewhat below that of last year, owing to the large home demand, and something of a falling off in the demand from abroad.

The value of cottonseed oil exported from the United States during the past decade aggregates around 105 millions of dollars. In 1889 the total value of cottonseed oil exported amounted to only a little over 1 million dollars. In 1890, however, it was over 5 millions; in 1895, 6 millions; by 1900 it had grown to 14 millions, and in 1903 it was 14½ millions.

Cottonseed meal is another article of comparatively recent development in our export trade. Prior to 1894 the amount exported was not considered of sufficient importance to justify its separate statement in the list of articles exported from the United States. In 1895 the total was about 4 million dollars; in 1898, it was 8 millions; in 1900, 11 millions and by 1903 had grown to 12¼ millions.

The European countries are the chief consumers of both of these newly developed classes of products from cottonseed. Of the 14 million dollars' worth of cottonseed oil exported in the fiscal year 1903, over 2½ million dollars' worth went to France, over 3¼ millions to Netherlands, nearly 1½ millions to Austria-Hungary, more than 1¼ millions to Germany, and about 1½ million dollars' worth to other European countries, principally the United Kingdom, Mexico, Brazil, and other tropical countries also take considerable quantities of cottonseed oil, which is a substitute in many cases for olive oil, formerly imported largely into those coun-

tries. To Mexico the exports of cottonseed oil in 1903 were over 1 million dollars in value, and have ranged at about that figure for several years.

Of oil cake and oil cake meal exported from the United States last year, amounting to nearly \$20,000,000 (of which \$12,750,000 was from cottonseed), \$4,500,000 worth went to Germany, \$4,000,000 to Belgium, \$3,500,000 to Netherlands, and a little less than \$3,500,000 to the United Kingdom.

The table which follows shows the total value of the various products of cotton exported from the United States in the nine months ending with March, 1904, compared with the same period in 1894. The figures indicate that the grand total of cotton and its products exported during the fiscal year will amount to about \$400,000,000.

| —Nine months ending— | | | |
|--------------------------------------|---------------|---------------|-------|
| | | March 31— | |
| Cotton and cotton products exported. | | 1894. | 1904. |
| Cotton, raw..... | \$185,379,276 | \$330,070,018 | |
| Cotton manufactures. | 10,833,883 | 16,735,456 | |
| Cottonseed oil..... | 4,855,163 | 8,501,302 | |
| Cottonseed meal and cake | 6,395,871 | 7,828,737 | |
| Totals | \$207,464,193 | \$363,135,513 | |

COTTONSEED OIL OUTPUT.

"Now that the cottonseed oil manufacturing business has drawn to a close for this season," writes a prominent cottonseed oil manufacturer, "can you give me the estimated amount of oil in barrels made in the United States for the season just closing, and the previous five seasons? The writer has been a constant reader of The National Provisioner for the last nine years and has never seen any statistics on this subject."

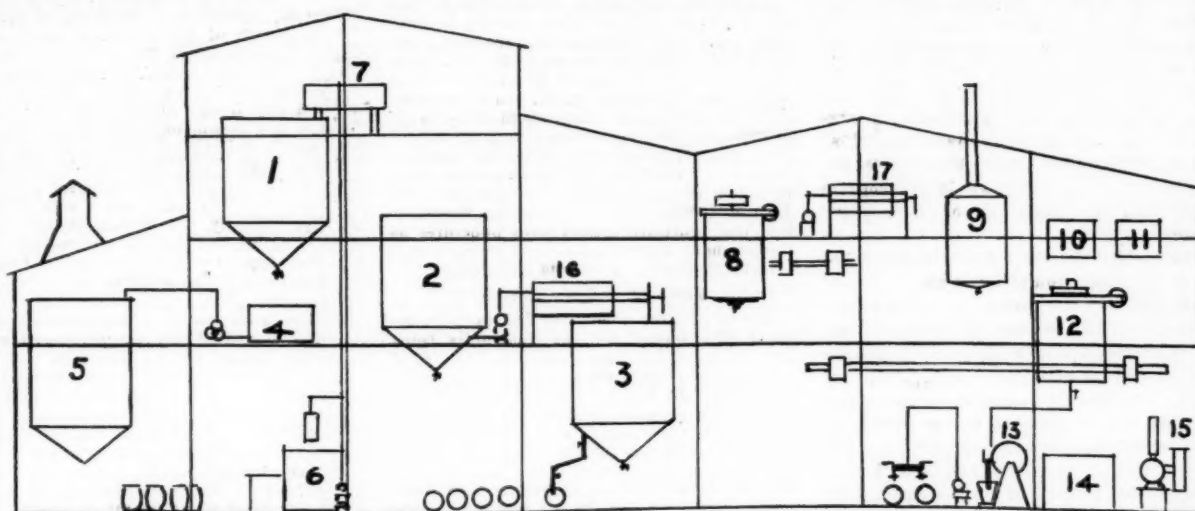
It will be understood that there are no positive figures concerning the production of cotton oil, and that estimates concerning it vary, at least moderately. Our reader may have observed some census bureau statistics published in The National Provisioner last week, which from deductions of the crush of seed makes the crude oil production (estimated) for the season of 1903 and 1904 as 126,415,614 gallons.

We must say that these figures are much beyond any trade estimates of the production, however close they may be to results. We will give as close as possible the inside views, concerning the production. The output of 1902 and 1903, which was the largest ever made, was about 2,600,000 bbls. crude oil. Some trade estimates made it 2,500,000 bbls., and others 2,750,000 bbls. The loss in refining that year made the production of refined oil (estimated) 2,288,000 bbls. The production of the oil in the previous season had been about 2,300,000 bbls. crude, or in the neighborhood of 2,000,000 bbls. refined. This year (1903-1904) the production would seem to be about 2,000,000 bbls. crude, with a much lighter loss in refining than in the season of 1902 and 1903, and which would show a loss of the crude oil production, as against the season of 1902 and 1903, of about 600,000 bbls. and of about 500,000 bbls. refined.

We may observe the fact, with which, however, our reader is undoubtedly familiar, that the consumption this season, thus far, of cotton oil by the home compound makers and soapmakers is very much less than that of last year.

The National Provisioner is the official organ of the cottonseed and cotton oil industry.

Arrangement of Tanks and Machinery for Refining 100 Barrels Crude Cotton Seed Oil Per Day into Prime Summer Yellow, Deodorized White Oil and Compound Lard



1. Refining Tank Crude Oil.
2. Washing Tank Unfinished Yellow.
3. Finishing Tank, Prime Summer Yellow.
4. Foots Tank.
5. Soap Tank.

6. Strong Lye Tank.
7. Weak Lye Tank.
8. White Oil Tank.
9. Deodorizer Tank.
- 10 and 11. Beef Stearine or Tallow Tanks.

12. Mixer and Preliminary Lard Cooler.
13. Lard Roller.
14. Brine Tank.
15. Heavy Ice Machine.
- 16 and 17. Iron Filter Presses.

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BOLL WEEVIL DESTROYER FOUND

Experts of the United States Department of Agriculture have quite accidentally happened upon what may at last prove a remedy for the scourge of the cotton boll weevil. A Government botanist, exploring Guatemala for varieties of cotton plant which appeared to be immune from the ravages of the boll weevil, came upon a large brown ant, which proves to be the inveterate enemy of the weevil and its ruthless exterminator wherever it attacks the cotton. The discovery was followed up and some interesting investigations made, and the latter will be continued in the hope of establishing the certainty of this weevil remedy.

The problem for the cotton growing industry of the United States is: Can this Guatemalan ant be transplanted to our temperate climate, and will he bring his weevil-destroying characteristics with him? It is possible that altered climatic and other conditions might so change the nature of the insect that it would lose its value to the cotton grower as a weevil exterminator. The Government experts will now proceed to test these theories by transplanting some of the Guatemalan ants to Southern cotton fields. The result will be anxiously awaited, for the success of the experiment will mean millions to the cotton growing and allied industries of this country, and it will mean victory at a time when it had been almost admitted that there was no cure for the boll weevil pest.

O. F. Cook, Government botanist in charge of investigations in tropical agriculture, during a visit to Guatemala in 1902, discovered varieties of Indian cotton not infested by the cotton boll weevil, while tree cotton nearby was literally eaten up by the insects. The immunity of the cotton was ascribed to the variety of the plant, and the matter was dropped at the time. Early in the present year, when the weevil question was agitated in Congress, this case was recalled, and Mr. Cook was sent to Guatemala to make further investigations. This time he discovered the true cause—the Guatemalan weevil-eating ant. Following are the vital sections of Mr. Cook's recent report to the Department of Agriculture:

Botanist Cook's Report.

A thorough search shows that the weevil is present and able to injure the cotton, but reveals also an active enemy which keeps it in check. This is a large reddish-brown ant which is attracted to the cotton by the food which it secures from three sets of extrafloral nectaries. To other insects which are occasionally present in numbers on the cotton the large brown ant pays no attention, but the weevil is attacked on sight and becomes an easy prey.

The ant's mandibles are large enough to grasp the weevil around the middle and pry apart the joint between the thorax and the abdomen. The long flexible body is bent at the same time in a circle to insert the sting at the unprotected point where the beetle's strong armor is open. The poison takes effect instantly; the beetle ceases to struggle, and with its legs twitching feebly is carried away in the jaws of its captor. As with many other insects when stung by wasps, the paralysis is permanent; even when taken away from the ants the beetles do not recover. The adroit and business-like manner in which the beetle is disposed of, in very much less time than even the briefest account of the operation could be read, seems to prove beyond question that the ant is by structure and by

instinct especially equipped for the work of destruction, and is, in short, the true explanation of the fact that cotton is successfully cultivated by the Indians of Alta Vera Paz in spite of the presence of the boll weevil.

Instead of congregating in large numbers on the cotton in the immediate vicinity of their nests the ants have, as it were, the good sense to spread themselves through the field, from two to four or five usually being found doing inspection duty on each plant. In some places there seemed to be not enough ants to go around, and here the beetles were more numerous. Rarely, too, certain flowers or branches seemed to have been overlooked, beetles being found on the same plants with the ants. In such instances, indeed, the young flower or boll was generally riddled with punctures as though many beetles had availed themselves of a rare opportunity of feeding undisturbed.

The Ant and the Cotton.

Cotton growing among the Indians is something of a special art, the community being supplied by a few men aware, as it were, of the secrets of the business. They know nothing about the weevil and its ravages, and ascribe such damage as occurs to other harmless insects, or even to superstitious causes, such as the failure of the owner to abstain from salt at the time of planting. The ant, however, is definitely associated in their minds with cotton, and they do not expect to secure a good crop unless these insects favor the plants with their presence. Some of the Indians give the ant a special name, *kelep*, not applied to any other species; but it is also referred to as "the animal of the cotton."

In the neighborhood of Secanquim, on the coffee estate of Messrs. Champney & Co., where most of our observations have been made, the ants are by no means widely distributed, and the cultivation of cotton is confined to very narrow limits, where it is planted year after year in closely adjacent places, or even on the same ground. In one instance the same Indian has planted cotton on the same hillside for upward of forty years, with no failure to secure a crop except in one year, as he explained, when he was sick and did not sow! Such facts preclude, of course, any explanation based on the theory of temporary immunity secured from burning over the land or by planting in a new place in which the beetles have not had time to congregate. The cotton is sowed in October or November, a very rainy part of the year, when land can not be cleared by burning, and the weeds are pulled out and thrown with the dead cornstalks and brush into piles, which would protect the beetles rather than destroy them. The perennial tree cotton also furnishes permanent breeding places, so that the conditions are most favorable to the propagation of the beetles in large numbers. The ants, however, are evidently able to hold them in check, and thus permit the regular cultivation of an annual variety of cotton by the Indians.

The boll weevil has migrated northward with the extension of the area of cotton cultivation into Mexico and Texas, but the ant has not yet followed. The question now is, whether it can be induced to do so. The Mexican entomologists seem not to have found the ant in that country, in the Northern States of which the weevil has been reported as very destructive. That the ants are so localized in their distribution in this part of Guatemala has undoubtedly served the better to demonstrate their value as protectors of the cotton plant; it suggests also, with other facts, the probability that they are not native here, but have spread eastward in smaller or larger colonies as the forests were cleared away by the Indians. The present occupation of the eastern districts of Alta Vera Paz by the Indians does not date back more than a few generations, though abundant evidences of much more ancient inhabitants are found in the apparently primeval forests. The ants, like the Indians, probably came from the dry, open interior plateau region, where the center of the aboriginal cotton industry of Guatemala is still located.

Can it be Transplanted?

To establish the fact of such an origin for this useful insect would greatly increase the probability of its successful introduction into the United States. The acclimatization of a thoroughly tropical animal requiring continuous heat and humidity could scarcely be hoped for. If, however, the cotton ant can survive a long dry season and perhaps cold weather in the tablelands of Guatemala, it might easily learn to hibernate in Texas, as has the boll weevil. The ant, indeed, is much better able to protect itself against frost, since it excavates a nest 3 feet or more into the ground. That it is a reasonably hardy insect is shown also by the fact that several individuals have survived confinement for twelve days without food, and seem now to be thriving on a diet of cane juice. To take worker ants to Texas will be, evidently, a very easy matter, but to secure queens and establish permanent colonies may require considerable time and experiment and a thorough study of all the habits of the species.

Although the cotton seems to be especially adapted to attract the ant by means of its numerous nectaries, the insect is not, like some of the members of its class, confined to a single plant or to a single kind of prey. It was observed running about on plants of many different families, and it attacks and destroys insects of every order, including the hemiptera, and even centipedes. On the other hand, it does not do the least injury to the cotton or to any other plant, so far as has been ascertained, and it can be handled with impunity, having none of the waspish ill temper of so many of the stinging and biting ants of the tropics. Since where once established it exists in large numbers and seeks its prey actively, it is a much more efficient destroyer of noxious insects than the spider or the toad. It seems, in short, not unlikely to become a valued assistant in the agriculture of tropical and subtropical countries, if not in temperate regions. The farmer has a new and practical reason to "consider the ant."

TEXAS ANTS FORESTALL RIVALS.

Additional evidence of the fact that certain varieties of ants will attack the Mexican boll weevil is furnished by a telegram received Tuesday by Secretary of Agriculture Wilson from a newspaper published in San Antonio, Tex. According to this dispatch two fields of cotton, covering about 600 acres in Bexar County, Tex., have been entirely cleared of the boll weevil by millions of ants now swarming on the roads and rows of plants. The roads near the fields are said to be filled with ants carrying off dead boll weevils. Secretary Wilson has telegraphed to expert entomologists connected with his department now in Texas to visit the locality and to make a thorough investigation.

The entomologists in Texas last year and in previous years thoroughly established the fact that several species of ants in Texas at times attack boll weevils, but none of the entomologists showed the ants to be anything like as destructive as they are reported to have been in Bexar County. There is a disposition in the Department of Agriculture to fear that the destructiveness of the ants in this locality has been exaggerated. If an investigation shows that the ants are really as destructive as reported it may not be necessary to introduce the ant discovered in Guatemala by Dr. Cook.

NORTHWEST LAMB CROP.

Advices from Montana and the adjacent range country state that the lambing is good and that a larger crop will be rounded up than was at first expected. The losses have not been as heavy in those parts as had been expected on account of the severe winter. The reports indicate that about 85 per cent. of the lambs will on the average be saved. This hope is aided by the present favorable weather.

SPECIAL NOTICE

LOUISVILLE COTTON OIL CO., Louisville, Ky.

LICENSED AND BONDED COTTON SEED OIL WAREHOUSE

The first, if not the only one of the kind in the world, and to do which it was necessary for them, unaided, to have the Kentucky Legislature enact a special Cotton Seed Oil Warehouse law, the effect of which will be to bring the producers and consumers in closer contact than ever before. Through the medium of this warehousing system, either can have the Crude Cotton seed Oil Refined for their own account at a nominal cost and stored until the market or their requirements justifies them in withdrawing same.

Full information will be furnished on request, though a synopsis thereof may be interesting to those who wish to take advantage of the proposition and have not as yet availed themselves of the opportunity. The Louisville Cotton Oil Co. will furnish tank cars free of charge for any party, either producer, distributor or consumer of Cotton Seed Oil (who desires to consign same) for the Crude Cotton Seed Oil to be refined and (shipped to or) stored for account of the owner; if stored, a licensed bonded warehouse certificate is furnished for the grade or quality of Refined Summer Yellow, which the Crude Oil will make and which certificate is negotiable and salable at the highest market price, such standard

grades of oil being practically as staple as any commodity on the market; in fact, is salable when and where Stocks and Bonds cannot be disposed of.

It is an entirely new departure, and we predict that in the future the Cotton Seed Oil Warehouses will be as prominent in their way as the Grain Warehouses of to-day, and for the same reason, viz: necessity. The Louisville Cotton Oil Co., however, has not only the advantage of location, but also the managerial experience which enables it to give better results than can be secured elsewhere, at present at least, and the same conservative progressiveness that has characterized it in the past will be used for the benefit of its customers in this new departure.

The Louisville Cotton Oil Co.'s grading of Crude Oil in the past has been invariably upheld by the various Exchange Arbitration Committees, as well as its grading of Refined, and which services will be given to all customers alike and for a minimum refining consideration. If the Crude Oil consigned does not make the quality of refined desired, or a better quality is required, a transfer will be made on request at the existing difference in market price.

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"ROYAL" Prime Summer Yellow.

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FOREIGN CATTLE FOR OUR BEEF MARKET

Some Americans are interested in Venezuelan and other South American range concessions. One of these lives in New York. He states in regard to the probable shipment of Venezuelan beef cattle to this country that the livestock industry of Venezuela has lagged for some time. There is no outlet for the stock and the local market is only a nominal one. It is probably thought that the United States would furnish some kind of outlet for such stock. He did not think that the whole shipment would come unless a steamer was chartered for that purpose. He did not think the shipment would pay, even with the duty off, because this market will not take its own beef of that grade and England will not take our grass stuff. Neither will she take Venezuela's.

He thought that the packers would welcome this importation for two reasons: First, it would show the eating public the kind of meat these Southerners grow and silence public cavil about stuff from that quarter; second, it would steady the cattle price talk of West-

ern stockmen, some of whom think that livestock is too low in proportion to the price of meat. Such a shipment would be a fair test of the American beef situation from a packers' and consumers' point of view.

He was surprised that the experimenters did not kill and freeze their stuff at home and save space, also the cost of killing under more expensive conditions here. "Beef sells as low as 6c. per lb. for as good as Venezuela sends," he said. "That means 3c. on the hoof. That means 1c. in Venezuela live weight, for it will cost fully 2c. per lb. to round up, ship, feed and land cattle from there at New Orleans and more at other ports. You can't get beef at 1c. per lb. in any South Central American country unless you are buying live fertilizer stock."

The United States Secretary of Agriculture has given his permit for the landing of 1,000 Venezuelan cattle. That simply means that the quarantine line has been taken down for that shipment. The trade will watch with interest their arrival and final disposition.

LIVE MEAT IN POLITICS

The National Livestock Association has decided to go into politics. The association and those it represents are interested in legislation all the time, but have no "lobby" at Washington. The dairy interests went into politics long ago. So did the tanners, the wool manufacturers and others. They have more or less a common center of gravity. That is, they get together and co-operate for their own profit. It can hardly be expected that dairy Congressmen will vote for anything but an anti-butterine bill, or that a woolen manufacturer will favor an anti-Shoddy bill. The iron and steel interests go to Washington and get almost what they wish. The livestock and meat industry go there and get very little.

There are 750 cottonseed oil mills crushing 2,000,000 tons of seed and selling nearly \$50,000,000 worth of products annually. They were joined by the growers of \$500,000,000 worth of cotton annually. These were supported by the owners of 40,000,000 cattle, 60,000,000 hogs and 62,000,000 sheep. These again were in line with the makers of 80,000,000 lbs. of butter product. All of the above had millions of other endorsers. All, as one man, asked Congress to give oleomargarine a fair and free market as a wholesome article of commerce. Congress replied by imposing a further tariff burden of 8c. per lb.—being 10c.

in all—upon the product in its home market, and all because the "other fellow" went to the polls and pledged his Congressmen to favor the heavy tax.

The stockmen have a big say-so in Western elections. They say that their choice will now be made at the polls and that from now on they will be in politics. A fund of \$200,000 is being raised for the cultivation of sentiment in higher circles. A campaign is being planned by President Hagenbarth and the other leaders of the National Livestock Association. All associations in the country will be asked to co-operate in the various States and at Washington. The stockmen propose to build up a Congressional delegation which will have an ear for livestock interest whispers. They will go in for the election of their own men.

CANADA'S CATTLE DUTY TALK.

The Canadian Northwest has a sort of Agrarian party of its own. It is Tory in politics and is now working for the placing of a duty on American cattle shipped across the border. One purpose of this is to make Dominion stockmen use local stock for breeding and other purposes. These will have to be purchased from the livestock politicians at an enhanced figure therefor. The move-

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Youngstown, Ohio

Chimneys Dryers

STEEL PLATE CONSTRUCTION

Riveted Pipe Stand Pipes

The Wm. B. Pollock Co.
Youngstown, Ohio

ment is a confession on the part of the Canuck that United States cattle are both preferable to and cheaper than Canadian stock. The encouragement to this end is lent by the fact that Americans are seeking pastures across the border and now graze about 200,000 beeves there annually.

REDUCED CATTLE EXPORT DUTY.

Colombia will endeavor to help the export of her cattle. Heretofore a heavy export duty has been levied upon cattle going out. Competition has hewn down values so close to cost that livestock will not stand the heavy embargoes formerly placed upon that industry. The Colombian Government has therefore reduced the export duty on male cattle to \$2 per head and to \$5 per head on cows and heifers. The duty is higher on females to retain them in the country for breeding purposes. The passage of cows out of the country showed the authorities at Bogota that the neighboring republics were drawing too heavily upon Colombian females for the improvement and enlargement of their own herds.

THIN SHEEP COMING.

The market is still being burdened with grassy half-fat sheep. They have been running for some time and show no disposition to ease up. Last week they trailed in from the Northwest and threw the market down nearly 1c. per pound. Just as fast as these thin animals are sheared they are forwarded from the ranges. On the contrary, good lambs hold high because they are abnormally scarce. This has enabled shrewd sellers to market yearlings and small sheep at a higher price because the butcher can use them as substitutes for lamb in his trade. The sheep still coming from the ranges show the harshness of the past winter upon the flocks everywhere.

1904

WELCOME

1904

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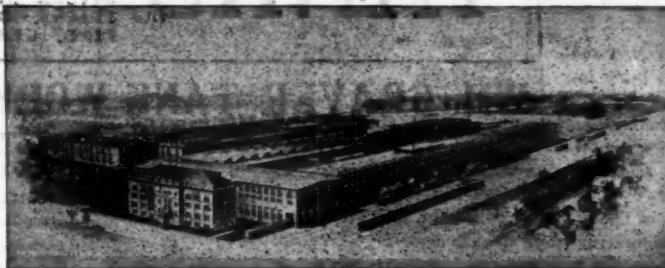
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373

HEAVY LIVE STOCK MARKETING.

Government statistical reports continue to indicate the unusually heavy movement of livestock to market that has characterized the past months.

Although domestic trade movements in the agricultural portions of the country during April are usually lighter on account of the smaller contributions of farming sections to freight traffic, reports to the Department of

Commerce and Labor, through its Bureau of Statistics, covering the current year to the end of April, show that livestock supplies during April at the five Western markets continued to arrive in unusual numbers, though rains, high water, and bad country roads retarded the movement somewhat toward the close of the month. Total arrivals at Chicago, Kansas City, Omaha, St. Louis, and St. Joseph exceeded two and one-half million—

2,569,672 head. In April, 1903, there were 2,461,868 head, and 2,189,634 head in April, 1902. Pasturing conditions at the close of the month were good generally, and the country's capacity to hold its stock for favorable marketing was reported to be ample.

These five markets have thus far in 1904 received 11,414,385 head of stock. In 1903 the total was 10,065,769 head, or nearly a million and a half less, while 10,220,642 head were reported in 1902.

FELIX PAQUIN, Ph.B.

ANALYTICAL CHEMIST

*Official Chemist of the Memphis Merchants Exchange,
Chemist and Bacteriologist of the Memphis Board of Health*

CITY HALL, - - - MEMPHIS, TENN.

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TRADE GLEANINGS

Extensive improvements to Dobbins' soap factory at Seventeenth and Federal streets, Camden, N. J., are being made.

The York Cotton Oil Co., York, Ala., with \$20,000 capital, has been incorporated by J. A. Coleman, W. A. Altman, W. A. Curry, C. B. Hightower and C. A. Allison.

The capacity of the New Orleans Acid and Fertilizer Co., New Orleans, La., is being increased at a cost of \$20,000.

A. A. Gambille and others, of Birmingham, Ala., have incorporated, with \$2,000 capital, the Birmingham Stock Feeder Co., to manufacture an automatic feeding device.

The Laurel Oil and Fertilizer Co., of Laurel, La., is doubling its capacity for manufacturing fertilizer.

The Britton Leather Co., of Brewer, Me., is enlarging its plant.

Forty thousand dollars damage was done to the Tionesta Tannery at McNary, Pa., recently by fire. The plant is being rebuilt.

The Halsell-Arledge Cattle Co., of Bonham, Tex., with \$100,000 capital, has been chartered to deal in and raise cattle. J. F. Arledge, J. S. Arledge, Z. A. Smith and Hugh Halsell were the incorporators.

The Brownsville Cotton Oil Co., of Memphis, Tenn., has increased its capital from \$50,000 to \$75,000.

Toledo, O., Reduction and Fertilizer Co., capital \$200,000, has been incorporated by Peter Parker, Isaac Gerson, C. E. B. Lamson, J. J. Weber and M. J. Wilcox.

J. M. Kyser, former manager of the Alabama Cotton Oil Co., of Huntsville, Ala., has organized a company with \$150,000 capital to build a cotton oil mill, soap and fertilizer factory, at Huntsville.

A \$20,000 fertilizer plant may be located at Clarksville, Tenn., through the Business Men's Association.

A packing plant is being planned by capitalists at Anthony, Kan.

The Cudahy Packing Co. will spend \$15,000 for additions and machinery in its Wichita, Kan., plant.

S. A. Maxfield & Co., are building an abattoir at Bangor, Me., capable of handling 500 sheep daily. It will be run in connection with the firm's wool business, where 2,500 pelts are used daily.

The E. O. Painter Fertilizer Co., of Jacksonville, Fla., has increased its capital from \$100,000 to \$250,000. The new capital will be spent for improvements, which will include a large dock and warehouses.

The North Star Tannage Co., of Philadelphia, Pa., has bought a lot at southeast corner of Richmond and Front streets, Philadelphia, and will build thereon.

The receiver of the National Salt Co. has sold its property in Syracuse, N. Y., to the

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TANKS

STEEL STORAGE TANKS, CAR TANKS, GRAIN TANKS, TANK CARS, CYLINDER TANKS, PRESSURE TANKS, STEEP TANKS, LARD, SOAP and REFINING KETTLES, RENDERING TANKS, STILLs, BOXES, PANS, SHELLS, STACKS, BLOW CASES, RIVETED PIPE, GENERAL PLATE WORK.

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International Salt Co., for \$193,310, which is \$144,132 less than was offered for it a year ago, when the sale was prevented by actions of stockholders.

The Spahn Soap Works at Lebanon, Pa., have been sold by Wm. H. Spahn to Simon Shucker and Harry Shindel, who are now operating the plant.

O. C. Bullock and John T. Fletcher, of Columbus, Ga., and some Tennessee capitalists, have bought 13 acres of land near Columbus on which to build a fertilizer plant, which will cost \$50,000.

Contract for building the plant of the Miller Fertilizing Co., at Canton, O., has been awarded. The building will be of one story and 112x176 ft. in size, and will cost about \$20,000.

The Delta Dressed Beef Co. has been incorporated in Denver, Colo., with \$200,000 capital, by John B. Ruhland, H. W. Woebert, J. A. Whiting, A. R. King, L. C. McGrew, S. B. Hartman, S. P. Hoine.

The Planters' Fertilizing Co., of New Orleans, La., was organized recently, with \$150,000 capital by Wm. T., John H., and Mrs. L. C. T. Maginnis, Wm. E. Turner, Wm. P. Brown, et al.

It is stated that the fertilizing works at East Syracuse, N. Y., are to be reopened, and that a glue department will be added to it.

The Middle Georgia Fertilizer Co., of Dublin, Ga., has been chartered with \$6,000 capital, by S. M. Kellam, A. W. Garrett, J. E. Smith, Jr., W. W. Bush, of Dublin; E. A. Lovett, Wrightsville, and B. B. Lovett, of Sandersville. The capital stock is \$6,000.

The Refuge Cotton Oil Co., of Columbus, Miss., announces that it will build a large fertilizer factory. About \$30,000 will be spent on it.

The Cudahy Packing Co. is preparing plans for a large cold storage plant and other needed buildings at Sioux City, Ia. Officials have inspected sites and are arranging details. It is proposed to spend about \$250,000 in improvements.

COMMISSION TO INVESTIGATE.

The Cattle Growers' Interstate executive committee has been notified that the Interstate Commerce Commission has issued an order to proceed of its own motion to investigate the freight rate situation and the service of railroads in live stock shipments in the West and Northwest. The hearing will be held in Denver, but the exact date has not yet been fixed. The investigation will be confined to the lines west of the Mississippi river, but will not include the rates east from Texas, Indian Territory, New Mexico and Arizona. It will include the rates and service from those States and Territories to northern ranges. The investigation will take in all discriminations, preferences and extortions to and from all those States covering the West as far as Idaho and Utah. This order was entered in response to a memorial presented by S. H. Cowan, legal counsel of the interstate executive committee, and Murdo Mackenzie, of the railroad committee.

The Cattle Growers' Interstate executive committee will prepare the case to be presented to the Commission, and will probably be joined by the National Wool Growers' Association in behalf of the sheepmen. The effect of this hearing, it is expected, will be to get at the actual existing facts in regard to these matters, and to also secure from the Commission a decision as to the reasonableness of these rates and service. Stockmen from all parts of the West will be asked to assist the committee in securing evidence, to show to the Commission the actual existing conditions in regard to the transportation of live stock in the West.

SULPHATE OF AMMONIA IN GERMANY.

Sulphate of ammonia as an import of the German Empire shows a gradual decline in quantity, possibly because of an increase in home production. The figures for the last three years, in hundreds of kilos, are: 1901, 444,077; 1902, 422,520; 1903, 351,680.

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WORLD'S FAIR PURE FOOD CONGRESS.

The director of congresses of the St. Louis Exposition has completed his plans for the International Pure Food Congress, which is to be held under the auspices of the National Association of State Dairy and Food Departments, in the Hall of Agriculture at the Fair from Sept. 26 to Oct. 1. The object of the congress is stated as being "in order to promote uniform food standards and a uniform and just government control for the manufacture and sale of foods."

The official bulletin announcing the programme says that "it is proposed to make this a congress of officials in charge of the enforcements of laws that control the purity of food products, of chemists conducting investigations of food products, of manufacturers and dealers in foods, and of all persons engaged in the preservation and distribution of food products. The topics for discussion will be:

Adulteration, misbranding and fraud in the sale of food and drink products.

The practical problems connected with the preservation, packing and distributing of the different food and drink products.

The use of antiseptics and coloring matters in foods and their effect upon the health.

Uniform standards for the quality and strength of dairy, food and drink products.

Uniform State, national, and international laws to control the adulteration of foods, and fraud in the sale of foods, and the best methods for enforcing these laws.

Methods of analysis for the detection of food adulterants.

To expose such specific adulterations and frauds as may be brought to the attention of the congress, and to recommend methods for suppressing and controlling them.

The organization committee of the congress includes United States Senator Porter J. McCumber, author of the McCumber pure food bill; Sebastian Mueller, Pittsburg, Pa.; Graeme Stewart, Chicago, Ill.; A. E. Jones, Chicago, Ill.; H. C. Adams, Washington, D. C.; N. P. Critchfield, Harrisburg, Pa.; Percy T. Morgan, San Francisco, Cal.; H. A. Weber, Athens, Ohio; Wm. Frear, State College, Pa.; Frederick W. Taylor, St. Louis, Mo.; Dr. Harvey W. Wiley, Washington, D. C.; T. B. Wagner, Chicago, Ill.; Gallus Thomann, New York; J. B. Noble, Hartford, Conn.; J. W. Bailey, Portland, Ore.; George P. Diehl, Cincinnati, Ohio; J. G. Manns, Chicago, Ill.; Dr. R. E. Doolittle, Lansing, Mich.; M. A. Seovell, Lexington, Ky.; Vincent L. Price, St. Louis, Mo. All inquiries concerning the congress should be addressed to R. M. Allen, secretary, International Pure Food Congress, Lexington, Kentucky.

WOMEN AND PURE FOOD.

The General Federation of Women's Clubs has gone in for a lot of things at its St. Louis Convention, which was held last week. Among the acts passed was one calling for a national pure food law. If some enterprising propaganda will give the ladies a liberal donation of trading stamps with every vote they get in Congress for a real good pure food law there may be hope for a female hustle in Congress in the interest of such a law. Mere resolutions will not count. The nation needs the law in question, one of the proper kind, but the present Congress has not the proper complexion for it.

EXPORTS SHOWN BY STEAMERS.

Following were the exports of commodities from New York to Europe for the week ending May 28, 1904, as shown by Lunham & Moore's statement:

| Steamers. | Oil | | —Beef— | | —Lard— | |
|--------------------------------------|-------|---------|--------|---------|--------|-------|
| | cake. | Cheese. | Bacon. | Butter. | Tes. | Pkgs. |
| Campania, Liverpool | 2020 | 165 | 500 | ..... | 149 | 550 |
| Bovic, Liverpool | 3262 | 1923 | 100 | ..... | 52 | 155 |
| Majestic, Liverpool | 1080 | 647 | 60 | ..... | 67 | 155 |
| Philadelphia, Southampton | 394 | 2000 | 5 | ..... | ..... | 800 |
| Minneapolis, London | 1328 | 392 | ..... | ..... | 100 | 8406 |
| Chicago City, Bristol ..... | ..... | 217 | ..... | ..... | 37 | 11125 |
| Idaho, Hull | 271 | 793 | 50 | ..... | 125 | 1020 |
| Furnessia, Glasgow ..... | ..... | 992 | 129 | ..... | 275 | 150 |
| Numidian, Glasgow ..... | ..... | 118 | ..... | ..... | 20 | ..... |
| Patricia, Hamburg ..... | ..... | 10 | ..... | 125 | 625 | 2579 |
| Palatia, Hamburg ..... | ..... | ..... | ..... | ..... | 57 | 390 |
| Ryndham, Rotterdam | 3000 | ..... | ..... | 45 | 1280 | 1375 |
| Zeeland, Antwerp | 6851 | 440 | 40 | ..... | 285 | 230 |
| K. Wil. der Grosse, Bremen ..... | ..... | ..... | ..... | 75 | ..... | 2600 |
| Bremen, Bremen ..... | ..... | ..... | 70 | 175 | ..... | 500 |
| Fricka, Bordeaux ..... | ..... | ..... | ..... | ..... | 110 | 125 |
| Norge, Baltic | 1000 | ..... | ..... | 95 | 260 | 350 |
| United States, Baltic ..... | ..... | 25 | ..... | 230 | 800 | 300 |
| Konig Albert, Mediterranean ..... | ..... | 163 | ..... | ..... | 35 | 1050 |
| Citti di Napoli, Mediterranean ..... | ..... | ..... | ..... | ..... | 50 | 125 |
| Utonia, Mediterranean ..... | ..... | ..... | 15 | ..... | 25 | 107 |
| Hermine, Mediterranean ..... | ..... | 80 | ..... | ..... | ..... | 20 |
| Gloamin, South Africa ..... | ..... | ..... | 15 | 20 | ..... | 275 |
| Total | 14113 | 5099 | 7965 | 500 | 469 | 780 |
| Last week | 20432 | 10177 | 7839 | 150 | 924 | 1093 |
| Same time in 1903 | 16544 | 10839 | 6145 | 272 | 704 | 550 |

EXPORTS OF PROVISIONS

Exports of hog products from Atlantic ports for week ending May 28, with comparative tables:

PORK, BARRELS.

| | Week May 28, 1904. | Week May 30, 1903. | Nov. 1, 1903, to May 28, 1904. |
|-----------------------|--------------------------|--------------------------|---|
| United Kingdom..... | 558 | 726 | 28,146 |
| Continent | 70 | 175 | 12,804 |
| So. and Cen. Am. | 327 | 374 | 13,022 |
| West Indies | 876 | 1,633 | 37,521 |
| Br. No. Am. Col. | 452 | 5 | 6,874 |
| Other countries..... | 22 | 4 | 1,689 |
| Totals | 2,305 | 2,937 | 100,056 |

BACON AND HAMS, POUNDS.

| | | | |
|-----------------------|-----------|-----------|-------------|
| United Kingdom..... | 8,453,081 | 9,078,914 | 297,231,321 |
| Continent | 526,781 | 449,625 | 42,716,547 |
| So. and Cen. Am. | 52,875 | 66,925 | 3,621,723 |
| West Indies | 223,125 | 385,975 | 7,648,913 |
| Br. No. Am. Col. | 12,000 | ..... | 52,300 |
| Other countries..... | 14,000 | 19,025 | 990,425 |
| Totals | 9,281,862 | 9,980,464 | 352,260,770 |

LARD, POUNDS.

| | | | |
|-----------------------|------------|-----------|-------------|
| United Kingdom..... | 4,600,404 | 4,482,530 | 151,304,299 |
| Continent | 4,884,741 | 3,684,905 | 184,761,759 |
| So. and Cen. Am. | 535,525 | 361,705 | 10,388,415 |
| West Indies | 700,400 | 878,915 | 20,340,705 |
| Br. No. Am. Col. | 280 | 7,500 | 286,380 |
| Other countries..... | 18,700 | 7,740 | 1,983,225 |
| Totals | 10,749,050 | 9,423,295 | 369,064,873 |

RECAPITULATION OF WEEK'S EXPORTS.

| From: | Pork, lbs. | Bacon and Hams, lbs. | Lard, lbs. |
|--------------------|------------|----------------------|------------|
| New York | 1,900 | 3,447,650 | 5,777,300 |
| Boston | 58 | 2,237,750 | 1,216,980 |
| Portland, Me. .... | ..... | 894,675 | 264,900 |
| Philadelphia | 276 | 112,194 | 844,143 |
| Baltimore ..... | ..... | 104,456 | 1,224,773 |
| Mottle ..... | ..... | 80,600 | 212,525 |
| New Orleans | 52 | 120,525 | 180,090 |
| Montreal | 10 | 2,314,012 | 1,027,740 |
| Totals | 2,305 | 9,281,862 | 10,749,050 |

COMPARATIVE SUMMARY.

| | Nov. 1, 1903, to May 28, 1904. | Nov. 1, 1902, to May 30, 1903. | Increase. |
|-------------------------|---|---|------------|
| Pork, pounds..... | 20,011,200 | 18,220,400 | 1,790,800 |
| Bacon & hams, lbs. | 352,260,779 | 344,687,234 | 7,573,545 |
| Lard, pounds..... | 369,064,873 | 352,163,905 | 16,900,968 |

OCEAN FREIGHTS.

| | Liverpool. Per Ton. | Glasgow. Per Ton. | Hamburg. Per 100 |
|-----------------------|------------------------|----------------------|---------------------|
| Canned meats..... | 7 6 | 12 6 | 16c |
| Oil cake..... | 6 3 | 5 | 12c |
| Bacon..... | 7 6 | 12 6 | 16c |
| Lard, tierces..... | 7 6 | 12 6 | 16c |
| Cheese..... | 20 | 25 | 2M |
| Butter..... | 25 | 30 | 2M |
| Tallow..... | 7 6 | 15 | 16c |
| Beef, per tierce..... | 1 6 | 2 6 | 16c |
| Pork, per bbl..... | 1 8 | 2 0 | 16c |

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OILS ALLIED TRADES

Cottonseed oil's entrance into the various food industries where oils are ingredients is largely hampered by legal prohibitions or by trade prejudice. For a long time the consumptive trade abjured lard and other edible compounds. Now that this prejudice has been virtually overcome, other interests have succeeded in imposing some legal restrictions under so-called pure food acts. These restrictions are excellent evidence of the fact of the acceptance of compounds by the eating trade. The legal restrictions are more potent against such a compound as oleomargarine because of the imposition of a 10c. per pound tax upon butterine.

There are other lines of industry which offer a large field for the consumption of cottonseed oil and in which that substance is now being used to a greater extent. The French and Italian makers of olive oil find that their native substance is too tender to travel or to keep pure in various climates. A component of cotton oil is added to strengthen the export article. These sophisticators do more; they introduce the blended article into their domestic trade after having tinged the compound with that shade of green peculiar to olive oil. These blended oils do not so readily become rancid. The French and the Germans are the chief followers of the practice of blending

olive with cottonseed oil, and they are largely responsible for its use in the home trade. It is believed that fully five per cent. of the American oil exported finds an outlet in this way and its use is on the increase.

Cheese is also being sophisticated with cottonseed oil. The successful manufacture of oleomargarine demonstrated the fact that dairy products and the oil of the cottonseed would incorporate satisfactorily. The result is not an injury, for the cottonseed oil product is as a rule more healthful than the other substance. The eating public does not notice any difference and is content. Possibly the largest prospective field for the use of cottonseed oil is the canning industry. All canned goods are more palatable with the oil added. Canned sardines, canned lobster, canned salmon, canned fish of all kinds, have a more satisfactory relish when so treated. The fish oil alone is too strong; another is added.

Cottonseed or a blended olive oil is being more largely used for many reasons. Canned meats and certain vegetables are also treated with oil. It is claimed that the oil helps the keeping process and that the goods thereby are less dry and more tasty. The stomach requires an amount of oil in foods and nature is not an autocrat as to the particular kind of oil to be used, just so it is wholesome. Cottonseed oil is wholesome in every sense and keeps well. The American canned fish industry is winning trade by the use of this ingredient. The Canadian fisheries have not taken to it so largely because the cheaper base is destroyed by the tariff against all cottonseed oils. When this barrier is removed Canada will be a larger consumer. If all legal barriers—State and international—were removed, cottonseed oil would have an enviably wide field.

SHIFT IN HOG WEIGHTS

The market did not specially demand a heavy hog last fall and was not specially calling for a heavy hog. The heavy hog was forced upon the market and depressed it by that fact. The heavy hog figured largely in the livestock movement because the banks forced the stockmen to liquidate and the heavy hog was his biggest asset. These having been disposed of, the pressure which was still kept up began forcing the big pigs forward. This time last year hogs averaged around 225 lbs. They now average around 208 lbs. In June, 1903, they averaged 231 lbs. and went up to 257 lbs. in September, dropping back to 228 lbs. in November and to 206 lbs. in January, 205 lbs. in February, 206 lbs. in March, 208 lbs. in April and about that figure for May. Hogs have marketed lighter every year on the average since 1896, when the average per head was 246 lbs. It was 242 lbs. in 1897, 241 lbs. in 1898, 237 lbs. in 1899, 233 lbs. in 1900,

226 lbs. in 1901, 220 lbs. in 1902, and 227 lbs. in 1903.

Averages never varied so widely in the spring and fall as last and this year. The only inference is that the live hogs have been forced in by financial pressure or that the hog supply is being deeply culled because of a hog shortage. This latter inference is hardly the correct one, though there is not in sight an over supply of swine. Lighter hogs mean less lard and pork, and, in all probability, a better market for the products. Lower hogs do not seem in sight. Lower hog products would seem improbable. Prices are steady apparently for an ultimate rise.

PELTS AND WOOL OUTLOOK

Foreign wool and pelts are holding strong. Local wool is slow. Pelts are generally sold under six months' options. The conditions of the pelt market at present and its prospects are such as to indicate that the renewal of the options will be on a higher basis. Wool pullers may expect this. The wool market generally should not decline for some time to come. The American clip will more than likely fall below that of last year. The shearing to date indicates this; so does the round-up of sheep and lambs. The Australian clip will be heavier, though not much so, than that of the previous year. The European clip will be about 10 per cent. short and that of South America hardly normal. There is no reason to believe that mohair will spring any surprise. The woolen mills are not oversupplied, even though they make some concerted effort to convey that impression. Their warehouses are not overcrowded. They have intimated to their consumptive trade the advisability of ordering early and of having patience because of the orders ahead. They give the impression of business in hand and of an active trade. All of this, if true, looks well for the wool merchant, in view of the stated facts that the warehouses are not overstocked with wool or woollens and that the visible and probable supply this year will be slightly less than that of last year. The market looks strong.

EATING MORE MEAT

Montana is not only growing and feeding a lot of fine beef, but the people of that State are eating a lot of beef. The reports from such places as Butte indicate that more beef than ever is being killed and eaten locally. The big fellows and the smaller abattoirs divide the trade. Montana stock have been fattened for the local markets and sold at prices which pay for such meat. In spite of the locally favorable live meat market conditions, the carload stuff from Chicago and Omaha has gone into Montana and held down the prices at the home abattoirs. This central competition acts as a "bear" on prices all over the country and keeps fresh meat within due bounds of a reasonable consumptive market.



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ICE AND REFRIGERATION

CORPORATION NEWS.

Tri-State Sanitary Dairy Co., of Cumberland, Md., has been incorporated, with \$50,000 capital, by Thos. H. Hobbs, C. F. Welton, James M. Spear, et al.

The Pueblo, Colo., Ice & Coal Co. has been chartered, with \$50,000 capital, by Emerson Carey, J. G. Puterbaugh, Geo. Cable and Geo. W. Huff.

Messrs. Fennel & Sagendorph, of Marshall, Mich., have asked to be given a site on which to build a cold storage plant. The City Council approves the plan and a company is being organized.

The Sterling Ice & Fuel Co., of Marion, Ind., has been incorporated, with \$30,000 cash, by H. J. Paulus, C. N. Martin, John Pierce, Charles Sterling, Elsworth Harvey, I. L. Ayres and George W. Kleder.

Wolf Bros. & Co., bankers, of Philadelphia, Pa., for themselves and other stockholders have begun legal proceedings to prevent the merging of the Philadelphia Market Co. and the Quaker City Cold Storage & Warehouse Co., maintaining that such consolidation will injure the value of the stock they hold. The new corporation was to be called Pennsylvania Cold Storage and Warehouse Co., and the merger was approved by a majority of the stockholders last winter. The Pennsylvania Cold Storage and Warehouse Company was incorporated in March. Among the directors are Franklin M. Harris, Charles A. Porter and Frank D. Howell. The company is capitalized at \$1,000,000, with 20,000 shares at a par value of \$50 each. The Philadelphia Market Company was incorporated in 1889, with a capital of \$600,000. It has a bonded debt of \$500,000.

The Quaker City Company was organized in 1888, with a capital of \$300,000.

The Heermance Storage and Refrigerating Co., of New York city, has been incorporated with \$80,000 capital by T. H. Norton, E. H. Watson and R. G. Perry, all of New York.

Articles of incorporation have been filed for the Bancroft Creamery Company, of Pine Grove, Wis., with a capital of \$5,000. Incorporators: William H. Ragan, A. W. Manly and E. O. Beggs.

The entire plant of the Jarvis Terminal Cold Storage Co., at Jersey City, N. J., will be sold at auction June 14. Its storage capacity is 800,000 cubic feet.

The Creamery Packing Manufacturing Co., of Chicago, Ill., has increased its capital from \$2,000,000 to \$2,500,000.

NEW PLANTS.

Cypher Bros., Austin, Tex., have secured a franchise for an electric light and ice plant at Caldwell, Tex., and have begun building.

Seymour & Co., of Topeka, Kan., are building a new \$10,000 ice plant on Quincy street, Topeka.

The Anderson Fish & Poultry Co., of Cincinnati, O., will put up a \$15,000 cold store in the West End.

The Armour & Co. plant at Mason City, Ia., is being equipped with a 15-ton motor driven direct expansion refrigerating machine. The same company is adding a cold store to its plant at Jackson, Miss.

The Gambirinus Stock Co., of Covington, Ky., is building a new plant on Elliott street, that city.

The addition to the Indianola Light, Ice & Coal Company's plant at Indianola, Miss., has been completed and a ten-ton ice machine will be installed.

Arrangements are being made for a new ice plant at Cadiz, Ky.

A half-ton ice plant has been installed at the Georgia School of Technology at Atlanta for operation by the students of the graduating class.

The Northey Refrigerator Co., of Waterloo, Ia., has begun work on its new building, which will be 160x120 feet and two stories high.

The Fruit and Truck Growers' Association, of Haynesville, La., is preparing plans to build an ice and cold storage plant and canning factory.

A cold store, 75x40 ft., will be built by W. F. Kruger, of Burt, N. Y.

The Helleman Brewing Co., of Aberdeen, S. D., will soon put up a complete cold storage warehouse with modern refrigerating machinery.

A hundred-ton ice plant is being built at Shawnee, O. T., for the Anheuser-Busch Brewing Co., which will utilize the cold storage space.

FRESH AND COLD STORAGE BUTTER.

Although the usual cold storm of May did not materialize until the last week, there has been an unusual production of butter throughout the country. The warm weather of the previous week materially influenced production. If the refrigerator car lines had been prepared for this high temperature, the quality of the butter arriving would not have shown the effects of heat. It seems to be customary with the refrigerator car men to defer a proper icing of the cars until their collars are wilted with summer heat. In this instance, they were found unprepared, with the result that much full grass butter, which, if properly handled in transportation would have brought high prices, was relegated to a lower grade. In spite of all these disadvantages of weather conditions and imperfect transportation, the report of the butter market for May shows a decided increase in re-

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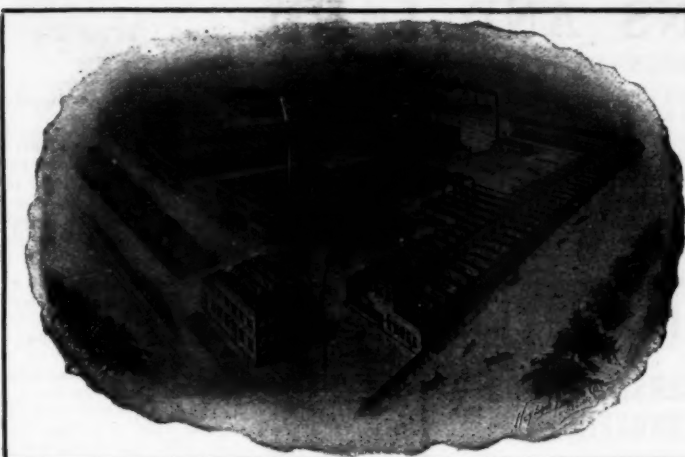
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ATING MACHINERY**

Louisville, Kentucky.

ceipts over last year, and prices made a decided break during the month. The opening quotation was 24 cents for extra creamery, and this price rapidly declined by jumps of two cents at a time until the quotation on June 1 was 18½¢. There has been a marked increase in receipts during the last six days, the record showing 50,757 packages as compared with 43,218 packages for the previous six days. A new feature of the situation is found in the fact that during the last week the quality of the butter has so far improved that the movement into cold storage has commenced with a prospect that large quantities will find their way into the freezers in the near future. There does not seem to be the usual speculation in this movement, but it shows the natural result of legitimate trade where an excess of receipts at reasonable prices makes it advantageous for the dealers to put away butter for future use. The lesson of last year has not been forgotten, and there is every prospect for a healthy condition this year in cold storage butter.

Prices in New York on June 1: Creamery, extras, 18½¢; do., firsts, 17½¢@18¢; do., seconds, 16¢@17¢; do., thirds, 14¢@15¢. State dairy, tubs, extras, 17¢@17½¢; do., firsts, 16¢@16½¢; do., seconds, 14¢@15¢.

In Philadelphia, the market has been quiet, with a decline of one cent during the week. Receipts have increased and stock of fine quality for cold storage has been received. The price for these goods has varied from

18¢@18½¢. Prices: Western creamery, extra, 18½¢; first, 17¢@18¢; do., seconds, 15¢@16¢.

In Boston the situation sympathized with Philadelphia and New York, and receipts increased with a movement of fine quality stock into the coolers. Prices were about the same as in New York. In Chicago, prices were a cent lower than in New York, receipts were increased and the movement of butter into cold storage commenced at prices which promised a fair profit for the holder.

FRESH AND REFRIGERATOR EGGS.

Last year's successful speculation in cold storage eggs has shown its effect in the present egg situation. Wild dreams of great wealth in egg production has resulted in a supply more bountiful than has ever heretofore been recorded. The farmers and small producers have turned their attention to egg production, hoping to realize untold wealth during the storage season.

The following represents the estimated cold storage holdings on May 31, as compared with the same date last year:

| | 1904. | 1903. |
|---------------------------------------|---------|---------|
| New York (inc. Jersey City) | 345,000 | 365,000 |
| Boston | 145,000 | 155,000 |
| Philadelphia | 103,000 | 132,000 |
| Total | 593,000 | 652,000 |

According to this table it will be seen that the shortage in storage holdings in these three Eastern cities is only 59,000 cases short of the record of last year. This has been more than equalized by the extra quantity of eggs stored in Chicago as compared with 1903. The receipts from northern sections in the East have rapidly increased and the close proximity to the Eastern cold storage houses have sent a high quality of stock into the refrigerators. The cold storm of last week has had its effect on receipts, with the result that prices have been firm throughout the week. In New York on June 1, nearby, fresh gathered extras, 19¢; do., firsts, 17½¢@18¢. Western, selected, storage packed, firsts, 18¢; do., seconds, 17¢@17½¢. Tennessee fresh gathered, seconds, 15¢@15½¢.

In Philadelphia the market was firm at 18¢. loss off for nearby fresh gathered and 16¼¢@17¢. at mark for choice; Western in free cases, 18¢. and 17¢@17½¢. at mark; Southern, 16½¢, loss off. In Boston the market was firm at 17¢@17½¢. In Chicago, the market was steady; fresh gathered extras being quoted at 17¢; firsts, 15½¢. In that city there is no way of determining the exact quantity of eggs in cold storage, but it is well known that the amount exceeds last year's record by many thousand cases and the prices at which the eggs were stored, although, not as low as last year, show a much more healthy condition and an absence of speculation heretofore unknown in the putting away of eggs for future use.

THE LEADING ARTICLES

IN

The March Number of

"COLD STORAGE"

AND

The April Number of

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BALTIMORE: Baltimore Chrome Works.
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JACKSONVILLE: R. E. W. Acosta.
NEW ORLEANS: Finlay, Dicks & Co., Ltd.
PITTSBURG: Pittsburg Transfer Co.

PROVISIONS AND LARD

WEEKLY REVIEW

All articles under this head are quoted by the bbls., except lard which is quoted by the cwt., in tcs., pork and beef by the bbl., or tierce, and hogs by the cwt.

Reactions From Strong Prices Through Larger Hog Receipts—Market Now Unsettled Under Expectations of Good Supplies of Hogs—Cash Demands Which Had Been Improving Becoming Quieter—Livelier Speculation in July and September Options.

The steady hardening of prices of the products for a few days up to Wednesday, and at times radical advances in pork prices, was giving encouragement to general buyers of cash stuff and options; there was more life to the distributing trading as well as to the July and September speculative deals; hopes were then entertained by many traders that the course of the market was permanently to more regular situations, although no very marked rise in prices was expected.

The improved tone of the hog product markets had sent confidence into other fat markets. There was wakening demands for tallow, which had advanced about $\frac{1}{4}$ c. in prices, with considerable buying of it by the soapmakers. The cottonseed oil situation was also coming out of its depressed situation and had recovered about two cents per gallon from its late inside prices, while exporters were buying the oil a little more freely and there was a fair prospect that the home compound makers would soon become interested in it, as the compound lard trading was increasing.

But at mid-week, under a rush forward of hog supplies, the products markets were again upset, and although the declines in prices were moderate, yet the fact that there was any abatement of confidence in them checked demands for the other products, which had been influenced to favorable positions for a few days before.

With the turn to weakness in lard, pork

and ribs positions in Wednesday's trading, chiefly on the hog receipts, the market was kept easy by the desire to take profits. Moreover there was a disposition to take advantage of the prices to put out larger lines of the products in the way of July and September sales. And upon that day even the prominent

them, and that the sentiment to put the market up only latterly had been indulged in more by one or two prominent sources. And that the opposition to bullish views was based more upon the expectations of larger hog receipts.

Larger hog supplies than for some time were upon the packing centres most of the week, and they exceeded estimates that had been made concerning them, while the belief in the trade of even freer supplies of hogs through the remainder of this month and in July tends to the opinion among some of the traders that bullish movements in the prices of the product could hardly be expected of more than a temporary order, while it encourages other trade sources which have held bearish views right along as to the ultimate market conditions, whatever exhibitions of firmness to the markets had been shown.

On Wednesday there were over 100,000 hogs received at eight packing points, and Chicago's receipts then exceeded estimates that had been made of them twenty-four hours before. Thursday's hog receipts were again of full volume and their prices were 5c. lower; the products markets then, besides having additional declines in prices, showed more of a pressure to sell, notwithstanding that then the grain markets were somewhat stronger.

The Chicago hog receipts in May were 619,000 head, against 612,000 head same time last year.

The announcement of the Chicago stocks of the products on Wednesday had something to do in influencing the weakness there over prices, as they proved larger of lard than had been expected and were telegraphed as follows: 96,290 tcs. lard, against 75,413 tcs. last month and 23,949 tcs. last year; 52,750 bbls. pork, against 52,857 bbls. last month and 19,061 bbls. last year; 18,975,000 lbs. short ribs, against 19,883,205 lbs. last month and 14,657,

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traders who had been on the bull side of the market turned to selling, while they found a more strict buying interest. On Thursday the declining tendency continued.

It, however, looked as if the late advance in prices of the products had not been favored in a general way by the leading traders in

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594 lbs. last year; 14,145,000 lbs. skinned hams, against 14,842,967 lbs. last month, and 7,966,569 lbs. last year; 41,605,000 lbs. regular hams, against 43,896,876 lbs. last month and 30,604,803 lbs. last year.

The average weight of the hogs at Chicago last week was 218 lbs., against 216 lbs. in the previous week, 229 lbs. corresponding week in 1903 and 222 lbs. in 1902.

The export demand for hog products has been of a cautious order latterly. Many of the export sources had supplied rather freely at lower prices than those current this week, besides very full consignments have been made for some time to Continental and United Kingdom markets, and it is possible to offer supplies there at relatively easier prices than the current lay down cost from here. But the home distributing business had recently been enlarged, and it is chiefly in this direction that the cash business has proved of larger volume.

Exports for last week from Atlantic ports: 2,305 bbls. pork, 10,749,050 lbs. lard, 9,281,962 lbs. meats; corresponding week last year, 2,937 bbls. pork, 9,423,295 lbs. lard, 9,980,464 lbs. meat.

In New York there has been a moderate export business at better prices, with sales of 400 bbls. mess at \$13@13.50; 150 bbls. family mess at \$14@14.50; 300 bbls. short clear at \$13.00@14.50. Western steam lard in better export demand, with some trade from refiners and sales of 1,250 tcs. on pt.; quoted at \$6.72. City steam lard sold at \$6.25 for 200 tcs. for export. Compound lard in freer demand and quoted at \$5.75, with some other lots at \$5.50. City meats have shown freer demand for pickled bellies, of which sales of 60,000 lbs., 12 lbs. ave., 6½¢; 14 lbs., 6¼¢@6½¢; 10 lbs., 7@7¼¢; smoking, 7½¢@7¾¢; green hams, 7½¢@8¢; green bellies, 7¢; pickled shoulders, 6¼¢@6½¢; pickled hams, 9¼¢@9½¢.

BEEF.—There is a good sale for barreled lots and at stronger prices. The English shipper are quiet; city extra India mess, tcs., \$13@14; barreled, mess, \$8; packet, \$9; family, \$10.50.

S. C. I. MEETING IN NEW YORK.

The Society of Chemical Industry is arranging to hold its annual meeting in New York on September 8, 1904. An attractive programme has been drawn up by the committee of the New York section for a tour to follow the meeting and occupy the remainder of the month. Washington, St. Louis, Pittsburg, Chicago and Niagara are among the places to be visited, and a number of factories will be inspected en route.

ADDITIONAL APRIL EXPORTS.

Following are figures compiled by the Bureau of Statistics, U. S. Department of Commerce and Labor, on certain exports for April, 1904, and for the ten months ending with April, as compared with the same period of the previous year. These are in addition to the export figures for meats and provisions for April published in The National Provisioner on May 28:

Bones, Hoofs, Horns, etc.—April, 1903, value \$13,578; April, 1904, value \$21,304. For ten months ending April, 1903, value \$152,628; same period, 1904, value \$166,189.

Cottonseed, Oil Cake and Meal.—April, 1903, 55,563,827 lbs., value \$630,952; April, 1904, 55,861,862, value \$687,710. For ten months ending April, 1903, 982,761,735, value \$11,414,643; same period 1904, 760,365,672, value \$8,516,447.

Cottonseed Oil.—April, 1903, 2,033,959 gals., value \$844,037; April, 1904, 2,293,367 gals., value \$802,239. For ten months ending April, 1903, 32,250,472 gals., value \$12,853,725; same period, 1904, 24,780,055 gals., value \$9,303,541.

Glue.—April, 1903, 220,762 lbs., value \$21,164; April, 1904, 253,778 lbs., value \$24,674. For ten months ending April, 1903, 2,170,753 lbs., value \$213,414; same period, 1904, 2,232,062, value \$216,626.

Grease and Soap Stock.—April, 1903, value \$553,664; April, 1904, value \$263,297. For ten months ending April, 1903, value \$2,385,567; same period, 1904, value \$2,793,624.

Hides and Skins.—April, 1903, 1,250,216 lbs., value \$129,448; April, 1904, 3,410,069 lbs., value \$329,733. For ten months ending April, 1903, 10,692,786 lbs., value \$990,462; same period, 1904, 28,900,839 lbs., value \$2,841,086.

Lard Oil.—April, 1903, 37,957 gals., value \$33,244; April, 1904, 81,158 gals., value \$49,070. For ten months ending April, 1903, 308,901 gals., value \$265,446; same period, 1904, 329,869 gals., value \$215,517.

Lard Compounds.—April, 1903, 5,685,268 lbs., value \$449,121; April, 1904, 6,056,826 lbs., value \$400,688. For ten months ending April, 1903, 35,471,187 lbs., value \$2,809,234; same period, 1904, 42,527,477 lbs., value \$2,046,998.

Mutton.—April, 1903, 27,113 lbs., value \$2,721; April, 1904, 61,739 lbs., value \$4,815. For ten months ending April, 1903, 6,119,697 lbs., value \$530,104; same period, 1904, 401,056 lbs., value \$35,782.

Sausage and Sausage Meats.—April, 1903, 557,424 lbs., value \$58,126; April, 1904, 515,038 lbs., value \$55,466. For ten months ending April, 1903, 4,404,874 lbs., value \$487,408; same period, 1904, 4,090,443 lbs., value \$452,821.

Sausage Casings.—April, 1903, value \$129,795; April, 1904, value \$215,033. For ten months ending April, 1903, value \$1,532,452; same period, 1904, value \$1,646,853.

Soap (other than toilet or fancy).—April, 1903, 4,187,892 lbs., value \$158,550; April, 1904, 4,063,482 lbs., value \$158,716. For ten months ending April, 1903, 36,923,378 lbs., value \$1,481,891; same period 1904, 39,009,774 lbs., value \$1,533,632.

HIDES AND SKINS

(Shoe and Leather Reporter.)

CHICAGO.

| | |
|--------------------------------|---------|
| Native steers, spready..... | 12¼@12½ |
| Native steers, heavy..... | —@11¼ |
| Native steers, light..... | 9¼@10¼ |
| Texas steers, heavy..... | —@13¼ |
| Texas steers, light..... | —@12¼ |
| Texas steers, ex. light..... | —@11 |
| Butt-branded steers..... | 10¼@10½ |
| Colorado steers..... | —@10½ |
| Native cows, over 55 lbs..... | —@10¼ |
| Native cows, under 55 lbs..... | —@10½ |
| Branded cows..... | 10@10½ |
| Native bulls..... | 8¼@9 |
| Branded bulls..... | —@8 |
| Pates, per 100 lbs..... | —@85 |
| Trimnings, per 100 lbs..... | —@75 |
| No. 1 heavy steers..... | —@9¼ |
| No. 2 heavy steers..... | —@8¼ |
| Side-branded steers, fat..... | 8¼@9 |
| Side-branded cows, fat..... | 7¼@8 |
| No. 1 heavy cows..... | —@8½ |
| No. 1 buff hides..... | —@8½ |
| No. 1 ex. light hides..... | 0@9¼ |
| No. 2 buff hides..... | —@7¼ |
| No. 1 bulls..... | —@7¼ |
| No. 1 calfskins..... | 12¼@13¼ |
| No. 1 kips..... | 10@10½ |
| Deacon skins, each..... | 67½@87½ |
| Slunks, each..... | 40@60 |
| Horsehides, each..... | —@3.65 |

Sheep Pelts.

| | |
|---|-----------|
| Green salted pelts, packer lambs..... | 72¼@75 |
| Green salted packer sheep..... | 1.25@1.55 |
| Green salted packer shearlings..... | —@52¼ |
| Green salted country pelts..... | 85@1.25 |
| Dry pelts, Montana, butchers' full woolled..... | 12¼@13 |
| Dry pelts, Utah butchers' full woolled..... | 11¼@12 |
| Dry pelts, Wyoming, butchers' full woolled..... | —@12 |
| Dry pelts, Colorado and New Mexico, butchers' fair run..... | —@11 |
| Dry flint shearlings, good stock..... | 10¼@11 |
| Dry flint shearlings, damaged..... | 3@7 |
| Dry murrains, Montanas and Utahs..... | 12¼@13 |
| Dry murrains, Colorados..... | 11@12 |

BOSTON.

Dry—Selected.

| | |
|------------------|--------------|
| California..... | 21@25.19@— |
| Southern..... | 13@14 |
| San Antonio..... | 13@— |
| Texas..... | 21@25.17@17¼ |

Salted.

| | |
|--|-------|
| Brighton, abattoir steers..... | 9¼@— |
| Brighton, abattoir steers, butt-branded..... | 8¼@— |
| Brighton, abattoir cows..... | 8¼@— |
| New England cows, green..... | 6¼@— |
| New England cows, salted..... | 8¼@8½ |
| New England steers, salted..... | 9@— |

Wet Salted.

| | |
|-----------------------|-------------|
| Southern..... | 35@40.7¼@8¼ |
| Texas ox and cow..... | 60@70.7¼@7½ |
| Western cows..... | 8¼@9 |
| Western seconds..... | 7¼@7½ |
| Extremes..... | 9@9¼ |
| Extremes econds..... | 8@8¼ |

Calfskins.

| | |
|-------------------|-----------|
| Dairy..... | 60@65 |
| 4 to 5 lbs..... | 80@85 |
| 5 to 7 lbs..... | 1.00@1.00 |
| 7 to 9 lbs..... | 1.30@1.35 |
| 9 to 12 lbs..... | 1.60@1.65 |
| 12 to 16 lbs..... | 1.85@1.95 |
| 16 to 25 lbs..... | 2.15@2.25 |

NEW YORK.

Selected.

| | |
|--|-------|
| City natives—60 lbs. and over..... | —@11 |
| City butt brands—60 lbs. and over..... | —@10 |
| City Colorados—60 lbs. and over..... | —@10 |
| City bulls—all weights..... | 8¼@8½ |
| City cows—all weights..... | —@9 |

City Calfskins.

| | |
|-----------|---------|
| 5-7..... | —\$1.15 |
| 7-9..... | —1.45 |
| 9-12..... | —1.70 |

Country Calfskins.

| | |
|-----------|---------|
| 5-7..... | —\$1.00 |
| 7-9..... | —1.30 |
| 9-12..... | —1.60 |

LIVERPOOL STOCKS.

| | June 1. | May 1. |
|-----------------------|---------|--------|
| Bacon, boxes..... | 13,300 | 19,600 |
| Hams, boxes..... | 4,800 | 4,100 |
| Shoulders, boxes..... | 800 | 1,500 |
| Cheese, boxes..... | 54,300 | 84,200 |
| Butter, cwt..... | 4,700 | 5,100 |
| Lard, tcs..... | 5,800 | 4,500 |
| Do., other, tons..... | 2,700 | 2,310 |

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TALLOW, STEARINE, GREASE and SOAP

WEEKLY REVIEW

TALLOW.—The markets over the west and in the interior have exhibited more animation than the New York situation, although there has been a stronger feeling everywhere as to prices.

The late advance at the west has been sustained, besides larger sales have been made there to the soapmakers. Then again there has been quite free buying of other soap materials at the west, where desirable grades of greases, especially at the principal markets, have become quite scarce, while they favor sellers as to prices.

Just how much the late advance in the lard market had to do with the tallow situation of increased firmness is not quite clear, nevertheless it would be hard to see how it had other effect than that of reviving confidence in the fat situations rather than it had stimulated demands from the compound makers, although the soapmakers' demands may have been influenced partly by it.

It would seem as if the soapmakers had had the markets to themselves, with no material export or compound lard trade demands, and that the soapmakers had been buying chiefly because the soap trade had improved and because that there had not been discouraging exhibitions of the pure lard market.

But after the liberal takings at the west and which brought about the stronger market for tallow, as it reduced supplies of it, there was a quieter feeling and at mid-week the market was again quiet, yet firm, with then hardly important demand from any source of trading.

There is no question but that there was a good deal of distrust over the permanency of the late advance in lard, as it was believed to have originated only through special sources and that as the market for it was bid up that it was not followed by material buying; moreover, that it had to be forced upward, while on Wednesday on freer efforts to sell the lard that the prices for it reacted to weakness. Therefore, if the lard market settles again to a depressed situation the traders feel that the entire fat situations will lose their late increased firmness. And some trade expectations of easier prices for hog products are based upon the current somewhat larger receipts of hogs and the

belief of even freer supplies of the hogs as the summer packing season advances.

But a good point to the tallow situation is the better trading in England and at somewhat stronger prices, although England's advanced prices are not up to the improved prices in this country. The London sale on Wednesday showed 3d. advance, with, by one cable, 1,600 casks offered and 1,100 casks sold, and by another 1,500 casks offered and 900 casks sold.

New York has been asking 4½¢ for its city tallow in hhds., but has offered only one lot at that, yet it has only 4½¢ bid. A sale is in negotiation at this writing.

The city edible has been sold in New York at 4½¢ for 150 tes., and is held up to 5¢, with small lots sold at 5¢.

Country made is bought up more closely to its arrivals and its market prices show decided firmness. Sales of 345,000 pounds in lots at 4 to 4½¢ as to quality.

The western markets have had sales at 4½¢@4¾¢ for prime packers' and at 4½¢ for city renderers'.

(Continued on page 42)

OLEO STEARINE.—The moderate increase of business in compound lard fails, as yet, to start demands from the compound makers for the stearine. The pressers got much confidence from the attitude of the lard market up to mid-week, and notwithstanding the severe reaction to lower prices for lard do not care to give way in their views as to prices of the stearine. But there has been nothing sold since the business of the previous week at 5¼¢, and which remains the trading price, as a little supply is wanted, although the city pressers, some of them, talk to 6¢. Later sale of 3 cars out of town made in New York at 5¼¢.

LARD STEARINE.—Market held fairly firm at 7¢, without important trading.

COTTONSEED STEARINE.—At present nominal.

LARD OIL.—Trading is of a narrow order and in small lots, with some irregularity to prices; prime quoted at 56¢.

GREASE.—The shippers are buying a little low grade, and there is more of a business than latterly with the soapmakers; the market is firmer. Yellow quoted at 3½¢@

3¾¢; house, 3½¢@3¾¢; bone, 3½¢@4¼¢; B white, 4¢; A white, 4½¢@4¾¢.

GREASE STEARINE.—At rather stronger prices, with slightly better demands. Yellow at 4¼¢; white at 4½¢@4¾¢.

OLEO OIL.—Rotterdam is dull at 43 florins. New York has a moderate trading; choice at 7¼¢; prime at 6½¢; low grades, 5½¢.

COCOANUT OIL.—Decidedly strong market. Ceylon, spot, 6¼¢; do., June arrival, 6½¢; June to August shipment, 5½¢@6¢; Cochin, spot, 7@7¼¢; June and July arrivals, 6¼¢; June shipments from the coast, 6½¢.

PALM OIL.—Rather more freely offered at easier prices. Red, 5½¢@5¾¢; Lagos, 6¢, spot.

CORN OIL.—Very irregular and quoted \$3.25 bid for second hand lots up to \$3.75 asked for job lots.

NEATSFOOT OIL.—Demands increase a little for jobbing quantities; 20 cold test, 95 @96¢; 30 do., at 85@86¢; 40 do., at 84¢; prime, 50¢; dark, 44@46¢.

PRODUCE EXCHANGE NOTES.

Five Exchange memberships were sold at \$210, \$220 and \$225.

Proposed for membership: Manfred Zuckermann, Warren D. Hamilton, Charles Eckstein.

New members: Lawson Sandford, John R. Crittenden.

Visitors: Frank Spencer, A. G. McArthur, London; Carl R. Brauns, Bremen; R. L. Sutherland, Newcastle, Eng.; Otto Benzon, Copenhagen; A. V. Roland, London; Samuel Cragin, Cincinnati; J. S. Floutt, Kansas City; S. H. Hanah, Geo. H. Moirder, Chicago.

The regular ticket nominated for the election to be held Monday, June 6, for officers of the Produce Exchange, is as follows: For president, Henry B. Hebert; vice-president, Grenville Perrin; treasurer, E. C. Rice; managers, A. C. Fetteroef, James F. Parker, W. E. Truesdell, Joseph S. Thayer, James R. Turner and D. M. Van Vliet. There will probably be an opposing ticket headed by Perry Williams for president and David Allerton for vice-president.

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New York City

COTTONSEED OIL

WEEKLY REVIEW

THE NATIONAL PROVISIONER is an official organ of the Interstate Cottonseed Crushers' Association, and the official organ of the Oil Mill Superintendents' Association of the United States.

Strong Situation—Small Advance in Prices and Followed by an Easier Tendency—More Reserved Offers to Sell—Increase of Export Demand—Compound Makers Continue Quiet—Better Business in Compound Lard.

There has not been much speculative activity to trading in New York for the week, or for that matter at any other seaboard market, but there has been some export demand for prime yellow and a light business with the mills in crude. Indeed, at most time in the week while there has been a little disposition to buy at something above the closing figures of the previous week, yet the offers to sell have been infrequent, and at even stronger prices, making the advance about 1c. per gallon for the week. On Thursday the market was quiet, and on Friday there was a weaker tendency with lard and cotton.

There appeared, however, a somewhat uncertain look to affairs, and which was based chiefly upon opinions concerning the future of the lard market, with the recognition of the fact that as lard prices drift the various manufactured goods from cotton oil will have enlarged or modified demands. The more confident feeling for the oil through the week had been based upon the higher lard market, and the light increase of export demands, although the lard position had only moderately started the compound lard trading, while it had not invigorated demands for the cotton oil from the compound makers.

That the lard market had gone up in price early this week had a suspicious look in the minds of many of the cotton oil, as well as hog products traders. It had not originated from thought of any inability to advance the lard market at the pleasure of the leaders in it, but only that doubts were entertained as to whether strong hog products markets had come to stay in view of the apprehended larger hog supplies, and the expectations that in the latter part of June and in July there will be liberal receipts of hogs, in the event of which it would be hard to believe that a bullish sentiment would be maintained on hog products. In any event it was hardly likely that there would be more than a moderate advance in the prices of the lard, although unquestionably in a development of a per-

manently strong market for the lard there would be a healthier sentiment over all associated fat markets.

That the late firmer course of the lard market gave a moderate start to the compound lard trading and that it increased the demand from the soapmakers for beef fats showed how quickly confidence was imparted all around by the sentiment over the hog fat situation.

Nevertheless, the feeling that the late slight bullish movement in lard as well as in hog products generally was more through the efforts of special sources to put the market up, and that the packers otherwise generally were opposed to advanced prices in consideration of the larger hog supplies, led to the belief that it would be followed by a weaker tendency, and Wednesday's market showed a reaction to lower prices for the hog products.

Indeed, the late advance in lard, it was thought by a portion of the trade, was occasioned more by efforts to get the market up to sell upon freely; when some selling was done on Wednesday the lard market yielded from its firm prices. In other words, some of the traders believe that the lard market is inherently weak and that it goes up spasmodically only as it is forced by some speculative move.

The compound makers have been using up within the last two weeks a much more important quantity of their held stocks of the cotton oil than at any corresponding time since the close of February. Nevertheless, the compound makers have not been forced to buy the cotton oil, although some of them would have to enter the cotton oil market for supplies if the compound lard trading keeps on growing, and which outcome would depend wholly upon the near future lard position.

It is not with distributors of food products a question of prices, so long as there are no marked changes in the prices from their current trading basis, but only a desire on the part of these distributors to consumers to feel fairly confident that there is not to be a return to late depressed market conditions for general fat markets.

Consumption of compound lard and cottonseed oil is keeping along from home sources in normal volume, however that it has been abated of them in Europe, and where more pure lard is now being used, as compared with the volume of it absorbed there in the previous year, as concerns the use of the oil for

edible purposes, while as relating to the soap trade the substitute or competing oils satisfy more freely than usual the wants of the manufacturers there to the neglect of Europe, in some degree, of cotton oil.

However, there has been a little more demand than latterly, through the week, for the cotton oil from some continental sources, and it has been more for nearby deliveries, notwithstanding the feeling that had been held that the European demand a few weeks since at the then low prices for the cotton oil, moderate as it was, had satisfied nearby requirements of the foreign sources which had been buying.

The moderate demand for the cotton oil last week from exporters for the fall months' deliveries did not exceed 2,000 barrels, and it was then satisfied at the prices noted in our previous review, while this week we have noticed that there was no additional demand for the fall months' deliveries from the foreign markets. Although there have been taken for export fully 5,500 barrels refined, prime yellow, June and July deliveries, at 28½c. to 29½c.

To show how indifferent as yet the home compound makers are in taking the cotton oil, and that some of them have all of the oil they can use for the present, it may be said they are not at all anxious to take several thousands of barrels due them on contracts, and that orders come from them to store some of the deliveries.

The soapmakers have had a freer business in soaps latterly, and they have been buying tallow more freely, and which has caused an advance of ¼c. in prices for the tallow; for instance, prime packer's tallow in Chicago has been sold up to 4½@4¾c., which shows a clean advance to the indicated degree, while it has been quite liberally taken there by the soapmakers; and in New York it is now impossible to buy city tallow in hhds. under 4½c., and not much is offered at that. It will be recollected that only a short time since city tallow, in hhds., stood at 4c. Moreover, the English markets are now stronger for the tallow, with the London sale on Wednesday showing 3d. advance, and where the demand was more competitive for the supplies on offer at the sale, with 900 casks sold out of 1,500 casks offered.

Yet, however improved the soapmakers' demands are for tallow, they are not, for the present, improved in cotton oil, although the fact that the soapmakers have awakened interest in one line of the raw materials for

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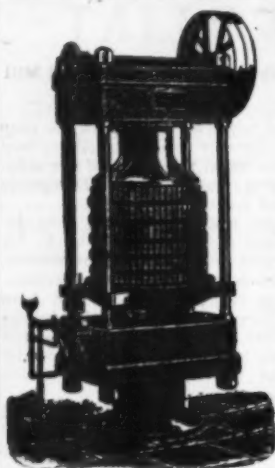
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soapmaking purposes would mean better possibilities of trading in all lines of them than had before latterly. Cotton oil at 29c. per gallon, which is about the price for June contracts, however that spot oil occasionally sells in a limited way at 30c., is practically 8.86c. per pound; therefore, comparing it with the price of tallow, there would be no reason why it should not have more attention from soapmakers except that there is not a disposition, as yet, to accept the outside quoted prices for tallow as general market rates.

Besides, there are many soapmakers as distinct from those who use cottonseed oil for the make of soaps at all times, who, after using tallow for a long time, are very slow in making changes from the use of tallow to cottonseed oil.

But we think that the improved business in compound lard has been helped as well this week, outside of the pure lard market influence, by the fact that the compound lard is now selling at a lower price as compared with pure lard than at any time since the

disturbed general fat markets in February.

The pure lard with which the compound lard competes in trading is now bringing generally 7½c., and the compound lard in a general way 5½c., and some other lots 5¼c. Here is a difference of about 1½c. per pound in favor of the compounds, while before the recent advance in the pure lard and the reduced prices for the compounds the difference was only ¾c. per pound.

Of course, in the greater portion of the previous year's trading the compounds were about 2½c. per pound below the prices of pure lard, but it was an exceptional year in that respect, and the current difference in values is a normal one.

This illustration of prices of compounds and pure lard is given more to show the possibilities of consumption of cotton oil on the part of the compound makers; the possibilities, however, need encouragement as concerns a healthier business in compound lard, a disposition to keep the pure lard market up in price, and which is not, as yet, pronounced.

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By Dr. Henry Gathmann
The National Provisioner
Floor A, Produce Exchange, New York

See Page 48 for Bargains

It looks to us as if the lard market would settle again to an irregular, fluctuating basis, and that there is not much prospect of a permanently healthy tone to it until the summer hog packing is well over, although there is not much chance of radically lower prices for the lard.

The point we wish to make is that the entire fat positions would be sensitive to a permanently enlivened lard market, more particularly because buyers of fats and of manufactured goods have been cautious for a protracted time; therefore that many consuming sources need freer supplies, and that their buying would move sufficiently extensive on a development of steady confidence in the fat positions to accelerate all conditions of prices.

We hear of small lots of the cotton oil steadily being placed in store and not many withdrawals of supplies from store; therefore, there is an accumulation in store of the oil of full volume, but which would disappear before the new crop under development of

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DALLAS, TEXAS.

regular demands for the oil from consumers, instead of as at present the dulness in the trading from them.

The mills have been holding the crude oil somewhat stronger this week, the Valley has been talking 22c., where it had sold in the previous week at 21c., and Memphis at 23c. for a full lot. Texas had sold at 20½c., and in the Southeast about 21@22c. quoted.

The deliveries on June contracts are thus far only 3,500 bbls. out of about 12,000 bbls. due.

The Hull (Eng.) market is somewhat better this week, and where the production is steadily closely sold.

The market prices in New York since our last review have been as follows: On last Saturday prime yellow was at 29c. for July delivery; sales of 1,000 barrels do., June delivery, for export, at 28½c., and 200 barrels do. on spot at 30c.; 300 barrels for August delivery at 29½c. Monday, a holiday. On Tuesday, in the early part of the day, prime yellow was at 28c. bid and 28½c. asked for June delivery, 28½c. bid and 29c. asked for July delivery, 29¼c. bid and 29½c. asked for August delivery, 29¾c. bid and 30¼c. asked for September delivery, and in the afternoon a small advance on the late delivery, with August at 29½c. bid and 30c. asked; July at 28¾c. bid and 29c. asked, and June at 28c. bid and 28½c. asked.

On Wednesday, in the early part of the day, there was bidding of slightly higher prices, but no disposition to sell within ½c. of the bid prices; therefore, no sales; 28½c. was bid for near delivery, 29c. bid for July, 29¾c. bid for August, 30¼c. bid for September, 29¼c. bid for October, November and December together. In the afternoon there was a small advance in prices, with 250 barrels prime yellow, August delivery, sold at 30½c., and 600 barrels do., June, at 29c., closing then at 30½c. bid for August, 29c. bid and 29¼c. asked for June, and 29½c. bid for July. On Thursday there was a slightly weaker market on the lower lard and cotton markets, with August delivery offered early at 30½c., and 30c. bid; June at 28½c. bid and 29c. asked; July, 29¼c. bid and 29½c. asked. Sales of 200 bbls. Sept.-Oct. at 30½c., and in the afternoon 1,000 bbls. June sold at 28½c., and 400 bbls. Sept.-Oct. 30½c.; July closed at 29c. asked; August at 30½c. bid and 30½c. asked.

(Continued on page 42.)

FISH OIL IN JAPAN.

Advices from Kobe, Japan, note that buyers of fish oil there show more of an inclination to make purchases, which served to add firmness to prices of fish oils. The herring fishing in Saghellen Island is increasing year after year. The catch last year amounted to 46,486,000 gallons, or 937,000 bbls. Owing to the scarcity of vessels and high freight rates, business in all fish oils has been held in check.

The National Provisioner is an official organ of all cottonseed oil organizations.

A COTTON REVIEW.

"The South's Supremacy in Cotton-Growing" is the title of a large pamphlet just issued by the Manufacturers' Record of Baltimore, in which every phase of the cotton industry and the possibility of the South's maintaining the world's supremacy is discussed by numerous experts, including farmers, merchants, bankers and operators of cotton oil mills and cotton mills. The aim in securing this broad, general discussion of the possibilities of cotton-growing as affected by the selection of seed, treatment of soil and labor supply has been to present to the world a full survey from every point of view of this great question. This pamphlet also contains the statistics of cotton production, consumption and average price for the last 70 years, with other data bearing on the consumption of cotton in this country and Europe. The dominant note throughout the discussion is that, despite the deterioration of seed, which is admitted by a large number of writers, and the shortage in labor supply, the South will be able gradually to meet these conditions and to increase its production of cotton sufficient to enable it to retain the world's supremacy. This publication is of value to everyone interested in cotton or in the material interests of the South. The price is 25 cents per copy.

OIL MILLS AND MEAL BEEF.

Texas will join in the oil mill building this year. There have already been chartered two \$100,000 oil companies at Austin, a \$10,000 one at Longview, a \$100,000 company at San Angela, and one at Seely. The erection of large cotton gins and compresses in other parts of the State like Wolfe, Tye, etc., indicate the early establishment of oil mills at those centers. There will be built in Texas, if all plans carry this year, twenty-five or thirty new cottonseed oil mills, mostly of the crude oil type. One incentive to this is the beef feeding business. The Texas cottonseed meal beef is likely to become as general as the Texas grasser in the beef market.

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CHICAGO SECTION



F. E. Patterson, of the firm of John Patterson & Son, members of the Union Stockyards Exchange, died at Kansas City, Mo., last week, of tuberculosis, aged 40 years. The body was brought to Chicago for burial.

The Davies Warehouse Co. has just sold La Internationale Packing Co., Mexico City, through Mr. Talafero, who has charge of the company's affairs here, three carloads of pipe, valves, fittings, etc. Of course the enterprising Jim Duggan perpetrated the deed.

Billy Hawkins was in the Exchange Building the other day and asked Murphy if he had seen Pete Hamler on the floor. "What the devil are you giving me," says Murphy. "If Hamler were here how in — could I see any one else?"

O. P. Hurford, of hog hoist fame, is back again in Chicago for a rest, he says. He has been leading a very strenuous life for several weeks just installing his new patent scraper. Mr. Hurford has a number of patented special machines of which a full description will be given later.

James T. Healy is busy, together with John Moran, his old side partner, getting their packinghouse in Louisville into shape to start up at an early date. Talk about enterprising young men—these two were in the packing business before some of the younger packers of to-day were born.

All the live stock men here wish to see more evenly distributed receipts. Col. W. E. Skinner has advocated the desideratum at every opportunity he has had to speak of the matter to stock raisers singly and in bodies. The various stock raisers associations are becoming deeply interested in the question.

Quite a number of packingtown's smart set have switched from the "Ann" and "Brick" problem and are investigating this "Spirit Fruit" business. What a pity poor old John A. K. quit answering the roll call. This free-for-all business would have suited him down to the ground.

Board of Trade memberships are selling from \$2,975 to \$3,075 net to the buyer. Four or five have changed hands recently at these figures. The directors have decided to call for the \$25 assessment payable July 1st, with which to buy up memberships at \$3,000. This will give a fund of \$45,000 and retire fifteen memberships.

R. W. Young, general manager of the Weir & Craig Manufacturing Co., says that if any one wants any kind or size of a pump they will fill the order at a reasonable figure and guarantee the best of material and workmanship. Weir & Craig Mfg. Co. are getting a lot of business from foreign countries, especially Australia.

One of Chicago's most prominent hog buyers and market prophets says the talked of heavy run of hogs for June is likely to prove a big fizzle, and he will stake his reputation on hogs going close to, if not over, a dollar higher before August receipts are all in. Cattle and sheep are higher, which will increase the demand for the cheaper hog products. Fluctuations in hog values of late have been narrow, with a generally higher and stronger tone.

Ashleigh C. Hallimell, president and editor of the Chicago Live Stock World, is one of the most popular men in live stock circles. Mr. Halliwell says he has been "at it" now for nearly thirty years, increasing the value

of the papers he has been associated with and incidentally increasing his circle of good friends, and feels satisfied his efforts have not been in vain.

Preparations are practically complete for a new stockyards at Winnipeg, says the Drovers' Journal. It is the intention of the directors to run the yards after the style of the Union stockyards at Chicago, the company dealing direct with the rancher and the exporter. It has also been announced that Swift and Cudahy have been considering the advisability of opening packing houses in Winnipeg as soon as the demand will guarantee such action on their part. Other packing houses are also considering the same step and are being backed by local dealers.

Manager Leary, of the United Stock Growers' Association, head of the Salt Lake City stockyards, is pushing investigations with a view to putting an end to all causes of trouble in the way of selling return transportation by stockmen accompanying Eastern shipments and is confident that the railroads will soon have no occasion for further complaint in that line, says the Deseret News. Mr. Leary is endeavoring to have only those apply for transportation who are actually and honorably entitled to make such application and who it is known will not violate confidence and attempt to sell any return transportation.

P. J. Murray, who was one of the best buttermine salesmen Armour & Co. ever had, and was so recognized by the late P. D. Armour, and who afterwards did a large butter business on his own account—losing his fortune through some outside speculation he could not personally attend to—some time ago accepted the position of fish inspector from Mayor C. H. Harrison, whom he had ardently supported, spending much time and more money in the interest of the mayor and his party. Now the mayor shows his appreciation of the good-hearted Irishman by trying to oust him. Murray has a lot of good friends, however, and he has lost none of his wonderful business ability.

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He is not liable to "lay down" and die simply because politics requires it.

Average hog weight at Chicago continues light. Last week it was but 218 lbs., a gain of 2 lbs. over the previous week, but 11 lbs. less than the corresponding week of 1903. As but few pigs are now moving, this shows that packers were wrong in their prediction of a liberal supply of overweights during the spring marketing season. The average weight at Chicago for May will be the lightest for that month in ten years past, as these figures indicate: 1903, 227 lbs.; 1902, 219 lbs.; 1901, 227 lbs.; 1900, 228 lbs.; 1899, 232 lbs.; 1898, 225 lbs.; 1897, 237 lbs.; 1896, 243 lbs.; 1895, 227 lbs.; 1894, 227 lbs.; 1893, 225 lbs.

Live stock fixtures for the year are given by the Chicago Live Stock World as follows: Missouri State Fair, Sedalia, Aug. 15-19. Iowa State Fair, Des Moines, Aug. 22-29. Minnesota State Fair, Hamline, Aug. 29-Sept. 3. Nebraska State Fair, Lincoln, Aug. 29, Sept. 2. Ohio State Fair, Columbus, Aug. 29-Sept. 2. Wisconsin State Fair, Milwaukee, Sept. 5-9. Kentucky State Fair, Lexington, Sept. 5-10. Pennsylvania State Fair, Bethlehem, Sept. 6-9. New York State Fair, Syracuse, Sept. 5-10. Indiana State Fair, Indianapolis, Sept. 12-16. South Dakota State Fair, Yankton, Sept. 12-16. Central Canada Exhibition, Ottawa, Sept. 16-23. West Michigan State Fair, Grand Rapids, Sept. 19-23. Interstate Fair, Trenton, N. J., Sept. 26-30. Colorado State Fair, Pueblo, Sept. 26-30. Washington State Fair, North Yakima, Sept. 26-Oct. 1. Illinois State Fair, Springfield, Sept. 29-Oct. 7. American Royal Live Stock Show, Kansas City, Oct. 17-22. San Antonio, Tex., International Fair, Oct. 22-Nov. 2. St. Louis World's Fair: Cattle, Sept. 12-24; sheep and swine, Oct. 3-15. International Live Stock Exposition, Chicago, Nov. 28-Dec. 3.

Armour & Co. expect to start the operation of their Sioux City packing plant by October 1 at the latest, with from 800 to 1,000 men employed. When the plant shall be worked to the limit of its capacity 2,000 men will be given employment. The announcement as to the time when the plant shall be started was made last week by R. C. Howe, of Omaha, general manager of the Missouri river plants of the Armour Company. "It will be October 1 at the very latest," Mr. Howe said. "We will work from 800 to 1,000 men from the beginning, and we hope to double this number in a short time. We will not wait for the completion of the four-section building, but will use the old ham house for temporary purposes."

Mr. Howe said the plant as it has been planned is not large enough, and there is a probability that after his inspection of things he may recommend a decided enlargement of the institution.

BEEF OUTLOOK IMPROVING

Cattle are improving in price all along the beef line. Real good prime beefs are scarce, and there is a decided shortage in this class of stock. There are a lot of thin stock on the ranges. They show the severity of the past winter. The late spring did not improve their condition. These cattle will require a lot of feed to bring them to the pens fit. The result is as stated. There is a lack of prime beefs for the slaughter floor. This has had the effect of putting the price up on natives. Common stock and common beef are cheap. Both are a drug on the market, as no one cares to eat tough, sinewy meat. The bad condition of stock largely accounts for the low price of beefs and the stock demand in the consumptive market.

The year 1902 was a baby beef year. The average weight of steers that year was 980 lbs. Last year the average weight of beef steers killed was 1,039 lbs., or an increase of nearly 350,000,000 lbs. of beef over the kill of

1902. The weights to the end of May of this year indicate that the beefs of 1904 will average heavier than did those of 1903. The weights for each month are 5 to 15 lbs. heavier than they were for the same months of 1903. That would indicate that the slaughter of big calves has lessened and that there are enough cattle to supply the present slack demand without the necessity of calling upon the yearlings and two-year-olds so heavily as was done in 1902.

The general grade of beefs being lower than that of 1903 and 1902 made the average prices lower for this year to date than for the previous year, but cattle of similar grade in those years brought relatively lower prices, compared to the price of market beef, than they now do. The outlook for native beef is higher. The run of grassers, which usually takes place in June, will not properly set in until August, as things now look. Feeders are taking heart and will enter the market this summer and fatten more than last year.

AMERICAN PLANT FOR NEW ZEALAND.

American machinery houses have just been awarded a contract for the equipment of the new power plant of the Wellington Meat Export Company—a British concern, which operates large works at Wellington, New Zealand. The value of the contract is almost \$125,000. The existing power plant is operated by steam, and owing to the excessive cost of coal in that part of the world the installing of the gas generating equipment and electrical machinery, for which the American concerns have the complete contract, is expected to result in a saving of 75 per cent in fuel.

There will be a 3,000 horse-power gas generating outfit, comprising six generators of 500 horse-power capacity each. Two-cylinder horizontal gas engines will be installed. There will be nine engines aggregating in all 1,415 horse-power. Three will be of 225 horse-power capacity each, direct connected to 150-kilowatt direct current 250-volt electric generators. There will also be two 200 horse-power engines, one 160 horse-power, and one 100 horse-power engine, which are to be used for driving refrigerating machinery. Gas generators by the same plant will also be used for the large melting and heating kettles.

The entire power plant will be in full operation, it is anticipated, in December of this year. An American expert is now in New Zealand regarding the contract. The electric generators have not yet been purchased.

KANSAS CITY WAR MEAT VIEW.

Kansas City packers say there has been no advance in prices or increased activity in the meat markets as a result of the war in the Far East. One of the general officers of a big packing concern said the other day that, excepting for some barrel meat, the Russians had done no buying here since the outbreak

of hostilities, and, so far as the Japanese trade went, there was nothing to speak of.

"We are unable to say exactly at any time for what power meats are bought," said he, "but generally we can arrive at the real destination of the supplies. Kansas City is not having anything like the trade as a result of this war that it had with the British during the Boer war. The Japanese eat little, and of that little, almost none, is meat. The Russian are not giving their soldiers any canned meats, which are costly, but seem to be feeding them barrel meat. They have an abundance of cattle in their own country, and anybody can put up barrel meats. Consequently they are not customers of the American packers."

Leading Packers

through their alert
Purchasing Agents
Buy SUPPLIES Here

WHY NOT Y U ?

Woodenware

Packages

Paper

Salt

Pails

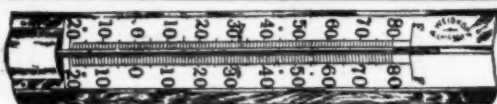
Skewers

Fuller's Earth, &c.

FRED K. HIGBIE
COMPANY

CHICAGO - BUREAU CITY - CHICAGO

35 So. Water St., Chicago



THERMOMETERS AND HYDROMETERS

THE BEST FOR PACKING HOUSES—AT THE RIGHT PRICES.

A. WEISKOPF,

MAKERS OF GOOD GOODS ONLY

67 So. Canal St., CHICAGO

CHICAGO PROVISION MARKET

RANGE OF PRICES

SATURDAY, MAY 28, 1904.

Exchange closed.

MONDAY, MAY 30, 1904.

Legal holiday.

TUESDAY, MAY 31, 1904.

| LARD—(Per 100 lbs.)— | Open. | High. | Low. | Close. |
|----------------------|-------|-------|------|--------|
| July | 6.50 | 6.65 | 6.50 | 6.60 |
| September | 6.67 | 6.80 | 6.65 | 6.77 |

| RIBS—(Boxed 25c. more than loose)— | July | September |
|------------------------------------|------|-----------|
| July | 6.57 | 6.75 |
| September | 6.75 | 6.92 |

| PORK—(Barrel)— | July | September |
|----------------|-------|-----------|
| July | 11.27 | 11.75 |
| September | 11.55 | 11.97 |

WEDNESDAY, JUNE 1, 1904.

| LARD—(Per 100 lbs.)— | July | September |
|----------------------|------|-----------|
| July | 6.57 | 6.60 |
| September | 6.77 | 6.70 |

| RIBS—(Boxed 25c. more than loose)— | July | September |
|------------------------------------|------|-----------|
| July | 6.70 | 6.75 |
| September | 6.90 | 6.90 |

| PORK—(Barrel)— | July | September |
|----------------|-------|-----------|
| July | 11.00 | 11.65 |
| September | 11.82 | 11.90 |

THURSDAY, JUNE 2, 1904.

| LARD—(Per 100 lbs.)— | July | September |
|----------------------|------|-----------|
| July | 6.45 | 6.47 |
| September | 6.65 | 6.67 |

| RIBS—(Boxed 25c. more than loose)— | July | September |
|------------------------------------|------|-----------|
| July | 6.65 | 6.65 |
| September | 6.80 | 6.75 |

| PORK—(Barrel)— | July | September |
|----------------|-------|-----------|
| July | 11.45 | 11.57 |
| September | 11.75 | 11.87 |

FRIDAY, JUNE 3, 1904.

| LARD—(Per 100 lbs.)— | July | September |
|----------------------|------|-----------|
| July | 6.40 | 6.50 |
| September | 6.55 | 6.55 |

| RIBS—(Boxed 25c. more than loose)— | July | September |
|------------------------------------|------|-----------|
| July | 6.60 | 6.72 |
| September | 6.77 | 6.90 |

| PORK—(Barrel)— | July | September |
|----------------|-------|-----------|
| July | 11.42 | 11.65 |
| September | 11.57 | 11.87 |

PROVISION LETTER.

(Special Letter to The National Provisioner from C. D. Forsyth & Co.)

Chicago, June 1.—Green hams, 10@12 ave., 9½@9½; do., 12@14 ave., 9½@9½; do., 14@16 ave., 9; do., 18@20 ave., 9½; green picnics, 5@6 ave., 6½; do., 6@8 ave., 6½; do., 8@10 ave., 6½@6½; do., 10@12 ave., 6½@6½; green N. Y. shoulders, 10@12 ave., 6; do., 12@14 ave., 6; green skinned hams, 18@20 ave., 10½; green clear bellies, 8@10 ave., 9½; do., 10@12 ave., 8½; No. 1 S. P. hams, 8@10 ave., 9½; do., 10@12 ave., 9; do., 12@14 ave., 8½; do., 16@18 ave., 9; do., 14@16 ave., 8½; do., 18@20 ave., 9½; No. 2 S. P. hams, 10@12 ave., 8½; do., 12@14 ave., 8½; do., 14@16 ave., 8½; No. 1 S. P. skinned hams, 16@18 ave., 10½; do., 18@20 ave., 10½; do., 20@22 ave., 10½; do., 22@24 ave., 9½; do., 24@26 ave., 9½; do., 25@30 ave., 9½; No. 1 S. P. picnics, 5@6 ave., 6½; do., 6@8 ave., 6½; do., 7@9 ave., 6½; do., 8@10 ave., 6½; do., 10@12 ave., 6½; No. 1 S. P. N. Y. shoulders, 8@10 ave., 6½; do., 10@12 ave., 6½; S. P. clear bellies, 8@10 ave., 9; do., 10@12 ave., 8½.

JUTE CLOTH—for printing tankage and blood
FINE BURLAP—for carrying hams and bacon.
BURLAPS and BAGS—for any purpose.

W. J. JOHNSTON, Manufacturer & Importer
182 Jackson Boulevard, Chicago.

CHICAGO LIVE STOCK.

RECEIPTS.

| | Cattle. | Calves. | Hogs. | Sheep. |
|-------------------|---------|---------|---------|--------|
| Monday, May 23 | 22,238 | 492 | 45,270 | 12,687 |
| Tuesday, May 24 | 2,586 | 4,026 | 16,828 | 14,398 |
| Wednesday, May 25 | 23,225 | 1,802 | 31,343 | 18,457 |
| Thursday, May 26 | 5,897 | 1,497 | 23,690 | 9,542 |
| Friday, May 27 | 1,206 | 310 | 14,531 | 3,704 |
| Saturday, May 28 | 300 | 100 | 12,006 | 3,000 |
| Total this week | 55,515 | 8,236 | 143,668 | 61,788 |
| Previous week | 52,902 | 7,612 | 135,535 | 60,638 |
| Cor. week 1903 | 54,903 | 6,710 | 147,196 | 55,767 |
| Cor. week 1902 | 55,717 | 7,977 | 137,138 | 53,945 |

SHIPMENTS.

| | Cattle. | Calves. | Hogs. | Sheep. |
|-------------------|---------|---------|--------|--------|
| Monday, May 23 | 5,912 | 1 | 9,907 | 1,335 |
| Tuesday, May 24 | 2,216 | 10 | 5,131 | 1,179 |
| Wednesday, May 25 | 6,151 | 15 | 3,794 | 768 |
| Thursday, May 26 | 3,972 | 20 | 3,853 | 2,354 |
| Friday, May 27 | 2,256 | 14 | 4,986 | 120 |
| Saturday, May 28 | 400 | 10 | 3,000 | 1,000 |
| Totals this week | 20,907 | 70 | 30,671 | 6,756 |
| Previous week | 22,861 | 215 | 37,375 | 14,432 |
| Cor. week 1903 | 23,938 | 140 | 20,916 | 917 |
| Cor. week 1902 | 15,200 | 650 | 21,915 | 3,540 |

Combined receipts of hogs at eleven markets

| | |
|------------------------------|---------|
| for week ending May 28, 1904 | 440,000 |
| Week ago | 482,000 |
| Year ago | 462,000 |
| Two years ago | 431,000 |

Receipts of hogs at eleven markets to date, 9,861,000

Year ago 8,602,000

Two years ago 8,684,000

Receipts at six points (Chicago, Kansas City, Omaha, St. Louis, St. Joseph, Sioux City) as follows:

| | Cattle. | Hogs. | Sheep. |
|--------------------------|---------|---------|---------|
| Week ending May 28, 1904 | 119,400 | 347,600 | 122,700 |
| Week ago | 116,500 | 374,500 | 137,800 |
| Year ago | 139,500 | 364,200 | 120,100 |
| Two years ago | 123,700 | 314,800 | 103,500 |

Estimated receipts of live stock, week ending June 4: Cattle, 60,000; hogs, 150,000; sheep, 60,000.

CHICAGO HOG SLAUGHTER.

Chicago packers slaughtered hogs during week ending May 28, 1904, as follows:

| | |
|--------------------|---------|
| Armour & Co. | 26,800 |
| Anglo-American | 12,500 |
| Continental | 3,800 |
| Swift & Co. | 19,000 |
| Hammond & Co. | 3,700 |
| Morris & Co. | 10,400 |
| Bord, Latham & Co. | 7,200 |
| S. & S. | 8,500 |
| H. Boone & Co. | 5,300 |
| Roberts & Oake | 3,000 |
| Other packers | 19,600 |
| Total | 119,800 |
| Left over | 2,000 |
| Week ago | 108,400 |
| Year ago | 145,500 |
| Two years ago | 126,100 |
| Three years ago | 148,100 |

AVERAGE PRICE OF HOGS.

| | |
|--------------------------|--------|
| Week ending May 28, 1904 | \$4.59 |
| Previous week | 4.70 |
| One year ago | 6.25 |
| Two years ago | 7.45 |
| Three years ago | 5.95 |

CATTLE.

| | |
|---|-------------|
| Choice to prime beefs | \$5.65@5.90 |
| Good to choice heavy steers | 5.20@5.60 |
| Fair to good export and shipping steers | 5.00@5.40 |
| Medium beef steers | 4.50@4.90 |
| Inferior and plain steers | 3.80@4.35 |
| Good to fancy cows and heifers | 4.25@5.00 |
| Good to choice feeders | 3.75@4.65 |
| Poor to fair stockers and feeders | 2.50@3.65 |
| Fair to good cows and heifers | 3.25@4.25 |
| Good cutting and fair beef cows | 2.60@3.20 |
| Common to good canning cows | 1.60@2.50 |
| Bulls, poor to choice | 2.00@4.50 |
| Calves, common to fair | 2.25@4.50 |
| Calves, good to fancy | 5.00@6.00 |
| Corn-fed western steers | 4.00@5.35 |
| Texas bulls and thin steers | 2.50@3.50 |
| Fed Texas steers, fair to choice | 3.50@4.60 |

HOGS.

| | |
|--|----------------|
| Good to choice heavy shipping | \$4.65 @ 4.82½ |
| Good to choice butcher weights | 4.67½ @ 4.80 |
| Fair to good heavy packing | 4.55 @ 4.70 |
| Rough to choice heavy mixed | 4.50 @ 4.65 |
| Assorted light, 160 to 190 lbs. weight | 4.55 @ 4.70½ |
| Good to choice 190 to 200 lbs. | 4.45 @ 4.60 |
| Inferior light mixed | 4.45 @ 4.60 |
| Poor to choice 60 to 135 lbs. pigs | 3.85 @ 4.45 |

SHEEP.

| | |
|-----------------------------------|-------------|
| Good to prime wethers | \$5.25@5.75 |
| Fair to good mixed lots | 4.75@5.25 |
| Fair to prime western wethers | 5.15@5.75 |
| Fair to prime yearlings | 4.90@5.75 |
| Fair to fancy ewes | 4.90@5.50 |
| Plain to good feeding stock | 3.40@4.00 |
| Culls and tail-end stock | 2.50@3.25 |
| Native lambs, poor to fair | 3.75@5.50 |
| Lambs, good to prime | 5.75@6.65 |
| Colorado-Mexican lambs, in fleece | 6.50@7.50 |
| Spring lambs | 5.00@8.00 |

RETAIL FRESH MEATS.

Beef.

| | |
|------------------------------|----|
| Native Rib Roasts | 14 |
| Sirloin Steaks | 18 |
| Porterhouse Steaks | 20 |
| Pot Roasts | 9 |
| Rib Roasts from light cattle | 12 |
| Beef Stew | 6 |
| Boneless Corned Briskets | 7 |
| Corned Rump | 6 |
| Ribs | 6 |
| Flanks | 6 |
| Round Steaks | 12 |
| Rosets | 10 |
| Shoulder Steaks | 10 |
| Rosets | 9 |
| Neck End | 6 |

Lamb.

| | |
|---------------|----|
| Hind Quarters | 14 |
| Fore | 10 |
| Legs | 10 |
| Breasts | 15 |
| Shoulders | 7 |
| Ribs | 14 |
| Loins | 16 |

Mutton.

| | |
|---------------|----|
| Legs | 12 |
| Breasts | 6 |
| Shoulders | 10 |
| Hind Quarters | 11 |
| Fore | 9 |

Pork.

| | |
|------------|----|
| Pork Loins | 9½ |
| Chops | 10 |
| Tenders | 23 |
| Butts | 8 |
| Spare Ribs | 7 |
| Blades | 6 |
| Knuckles | 5 |
| Pigs Heads | 4 |
| Leaf Lard | 7½ |

Veal.

| | |
|---------------|----|
| Hind Quarters | 8 |
| Fore | 5 |
| Legs | 10 |
| Breasts | 5 |
| Shoulders | 8 |

BUTCHERS' OFFAL.

| | |
|------------------------|------------|
| Tallow | 3½c. |
| Mixed Bone and Tallow | 24per lb. |
| Calfskins 8 to 15 lb. | 10c. @ 11½ |
| Calfskins, under 8 lb. | 6c. each |

SOUTH WATER STREET MARKETS.

Live Poultry.

| | |
|----------|----------|
| Turkeys | 11 @ 11 |
| Chickens | 12 @ 12½ |
| Hens | 12 |
| Roosters | 7 @ 7½ |
| Springs | 13 @ 13½ |
| Ducks | 12 @ 12½ |
| Geese | 8½ @ 9 |

Veal.

| | |
|--------|--------|
| Choice | 3 @ 8½ |
| Medium | 6 @ 7 |
| Small | 5 @ 5½ |
| Coarse | 4½ |

Dressed Poultry.

| | |
|----------|----------|
| Turkeys | 15 @ 16 |
| Chickens | 13 |
| Springs | 14 |
| Ducks | 13 @ 14 |
| Geese | 9½ @ 10½ |

BUTTER AND EGGS.

| | |
|-------------|---------|
| Best Butter | 19 @ 20 |
| No. 1 | 18 @ |
| No. 2 | 15 |
| No. 3 | 10½ |
| Best Eggs | 17 |
| No. 1 | 15½ |
| No. 2 | 14½ |

See page 48

for

BARGAINS

MARKET PRICES

CHICAGO.

WHOLESALE FRESH MEATS.

Beef.

| | | |
|----------------------------|---------|---------------|
| Western Cows..... | 7 | @ 7 1/4 |
| Native Cows..... | 7 1/4 | @ 8 |
| Western Steers..... | 8 | @ 8 1/4 |
| Good Native Steers..... | 8 1/4 | @ 8 1/2 |
| Native Steers, Medium..... | 8 | @ 8 1/4 |
| Heifers, Good..... | 7 1/2 | @ 7 1/4 |
| Heifers, Medium..... | 7 | @ 7 1/4 |
| Hindquarters..... | 1 1/4c. | over straight |
| Forequarters..... | 1 1/4c. | under |

Beef Cuts.

| | | |
|------------------------------|-------|---------|
| Steer Chucks..... | 6 | @ 5 1/2 |
| Cow Chucks..... | 6 | @ 5 1/2 |
| Boneless Chucks..... | 6 | @ 5 1/2 |
| Medium Plates..... | 6 1/4 | @ 7 |
| Steer Plates..... | 6 1/4 | @ 7 |
| Cow Rounds..... | 7 1/4 | @ 8 |
| Steer Rounds..... | 7 1/4 | @ 8 |
| Cow Loins, Common..... | 10 | @ 11 |
| Cow Loins, Medium..... | 10 | @ 11 |
| Cow Loins, Good..... | 11 | @ 12 |
| Steer Loins, Light..... | 12 | @ 13 |
| Steer Loins, Heavy..... | 13 | @ 14 |
| Beef Tenderloins, No. 1..... | 22 | |
| Beef Tenderloins, No. 2..... | 30 | |
| Strip Loins..... | 8 | |
| Seriotin Butts..... | 10 | |
| Shoulder Clods..... | 6 1/2 | |
| Rolls..... | 11 | |
| Rump Butts..... | 6 | |
| Trimnings..... | 5 | |
| Shank..... | 3 1/4 | |
| Cow Ribs, heavy..... | 9 | @ 10 |
| Cow Ribs, Common Light..... | 7 | |
| Steer Ribs, Light..... | 10 | @ 11 |
| Steer Ribs, Heavy..... | 11 | @ 12 |
| Loin Ends..... | 11 | |

Beef Offal.

| | | |
|------------------|-------|--|
| Livers..... | 3 1/2 | |
| Hearts..... | 3 | |
| Tongues..... | 1 1/2 | |
| Sweetbreads..... | 2 | |
| Ox Tails..... | 4 | |

Veal.

| | | |
|-------------------------|-------|---------|
| Heavy Carcass Veal..... | 7 | @ 7 |
| Light Carcass..... | 7 | @ 7 1/4 |
| Medium Carcass..... | 7 1/4 | @ 8 |
| Good Carcass..... | 8 1/4 | @ 9 |
| Medium Saddles..... | 10 | @ 11 |
| Good Saddles..... | 10 | @ 11 |
| Medium Racks..... | 5 | @ 6 |
| Good Racks..... | 6 | @ 7 |

Veal Offal.

| | | |
|------------------|----|--|
| Brains..... | 4 | |
| Sweetbreads..... | 4 | |
| Hearts..... | 5 | |
| Livers..... | 5 | |
| Plucks..... | 30 | |

Lambs.

| | | |
|-----------------------------|--------|----------|
| Medium Caul..... | 10 | @ 10 1/2 |
| Good Caul..... | 10 1/2 | @ 11 |
| Springfield Lambs..... | 11 | @ 11 1/2 |
| Round Dressed Lambs..... | 11 1/2 | @ 12 |
| Saddles Caul..... | 13 | @ 14 |
| Saddles Springfield..... | 14 1/2 | @ 15 |
| R. D. Lamb Saddles..... | 14 1/2 | @ 15 |
| Caul Lamb Racks..... | 12 | @ 13 |
| Springfield Lamb Racks..... | 12 | @ 13 |
| R. D. Lamb Racks..... | 12 | @ 13 |
| Lamb Fries, per pair..... | 5 | |

Mutton.

| | | |
|---------------------|----|----------|
| Medium Sheep..... | 1 | @ 10 |
| Good Sheep..... | 10 | @ 11 1/2 |
| Medium Saddles..... | 11 | @ 12 |
| Good Saddles..... | 12 | @ 13 |
| Medium Racks..... | 6 | @ 7 |
| Good Racks..... | 7 | @ 8 |
| Mutton Legs..... | 7 | @ 8 |
| Mutton Stew..... | 5 | |

Fresh Pork, Etc.

| | | |
|------------------------|--------|------|
| Pork Loins..... | 7 1/4 | @ 8 |
| Leaf Lard..... | 6 | @ 7 |
| Tenderloins..... | 15 | @ 16 |
| Spare Ribs..... | 14 | @ 15 |
| Butts..... | 5 1/2 | @ 6 |
| Hocks..... | 4 1/2 | @ 5 |
| Trimnings..... | 4 | @ 5 |
| Tails..... | 3 | @ 4 |
| Knuckles..... | 3 | @ 4 |
| Blade Bones..... | 4 1/2 | @ 5 |
| Cheek Meat..... | 3 | @ 4 |
| Hog Plucks..... | 3 | @ 4 |
| Neck Bones..... | 1 1/2 | @ 2 |
| Skinned Shoulders..... | 6 1/2 | @ 7 |
| Pork Hearts..... | 14 | @ 15 |
| " Kidneys..... | 14 | @ 15 |
| " Tongues..... | 10 1/2 | @ 11 |
| Slip Bones..... | 3 1/2 | @ 4 |
| Tail..... | 2 1/2 | @ 3 |
| Back..... | 1 1/2 | @ 2 |

Dry Sausage.

| | |
|--|----|
| Packed in 25-lb. boxes, 1/4c. per lb. extra. | |
| Extra Fine Cervelat..... | 20 |
| Choice H. C. | 18 |
| Fine H. C. | 17 |

| | |
|-------------------------------------|--------|
| Special H. C. Cervelat..... | 11 1/4 |
| Special B. C. | 11 1/4 |
| Western H. C. | 9 1/4 |
| Western B. C. | 9 1/4 |
| Goteborg..... | 12 1/4 |
| Milanese Salami in Hog Casings..... | 20 1/4 |
| Choice H. C. Milano Salami..... | 19 1/4 |
| Choice B. C. German..... | 10 1/4 |
| Fine B. C. | 15 1/4 |
| Special B. C. | 14 1/4 |
| Excelsior B. C. | 12 1/4 |
| Choice H. C. Arles..... | 12 1/4 |
| Choice B. C. | 17 1/4 |
| Fine B. C. | 10 1/4 |
| Choice Arles Frisces..... | 18 1/4 |
| Mortadella..... | 17 1/4 |
| Landjaeger..... | 17 1/4 |
| Holsteiner..... | 10 1/4 |
| Farmer..... | 11 1/4 |
| Coppa..... | 17 1/4 |
| Lyon..... | 27 1/4 |

Fresh Sausage, Etc.

| | |
|---|--------|
| Pork Link, large No. 1..... | 6 |
| Piggy Sausage..... | 6 1/2 |
| Sausage Meat No. 1..... | 6 |
| Pork Link, large No. 2..... | 6 1/2 |
| Sausage Meat, No. 2..... | 6 1/2 |
| Frankfurts..... | 6 |
| Special Frankfurts..... | 7 |
| Vienna Frankfurts, 10-lb. cartons..... | 7 1/2 |
| Polish..... | 6 |
| Knobloch, or Garlic Sausage..... | 6 |
| Head Cheese..... | 6 1/2 |
| Blood Sausage..... | 4 1/2 |
| Liver Sausage..... | 4 1/2 |
| Leona..... | 6 |
| Bologna in Weasands..... | 6 |
| Bologna in Cloth Bags (paraffined)..... | 6 |
| Ham Bologna in Paraffine..... | 6 1/2 |
| Bologna, long, round or large..... | 5 |
| Veal Ham..... | 8 1/2 |
| Minced Ham in Bladders (cooked)..... | 8 1/2 |
| Berlin Ham (cooked)..... | 7 |
| Prepared Ham in Cloth Sacks (cooked)..... | 8 1/2 |
| New Eng. and Ham in Cloth (cooked)..... | 10 1/2 |
| Boneless Ham..... | 9 |
| Tongue, white..... | 8 1/2 |
| Tongue, blood..... | 7 1/2 |
| Boneless Pigs Feet..... | 5 1/2 |
| Luncheon Beef..... | 5 1/2 |
| Fresh Pigs Feet..... | 3 |
| Smoked Loin Roll..... | 17 1/2 |
| Regular Boiled Hams..... | 15 |
| Smoked Boiled Hams..... | 15 1/2 |
| Boiled Picnics..... | 11 |

| | | | | |
|--------------------------|-------|------|------|------|
| | Bris. | Half | Qtr. | Kits |
| Spiced Pigs Feet..... | 6.50 | 2.75 | 1.50 | .70 |
| Pickled Plain Tripe..... | 3.50 | 1.70 | .90 | .45 |
| Pickled H. C. Tripe..... | 5.50 | 2.65 | 1.50 | .70 |
| Fr. H. C. Tripe..... | 9.00 | 4.25 | 2.25 | .95 |
| Pickled Ox Lips..... | 11.50 | 4.75 | 2.50 | 1.05 |
| Pickled Pigs Snouts..... | 11.50 | 4.75 | 2.50 | 1.05 |

Wholesale Smoked Meats.

| | |
|---|--------|
| Hams, 12 lbs. average..... | 11 1/4 |
| " 14 "..... | 11 1/4 |
| Skinned Hams..... | 11 1/4 |
| Cala, 6/7 lbs. average..... | 8 |
| " 8/12 "..... | 8 |
| Breakfast Bacon, fancy..... | 14 1/4 |
| Wide, 8/10 average, and Strip, 4/5 average..... | 11 |
| " 10/12 "..... | 5/6 |
| " 12/14 "..... | 6/7 |
| Dried Beef Sets..... | 12 |
| " Inside..... | 14 |
| " Knuckles..... | 12 1/2 |
| " Outside..... | 11 |
| Regular Boiled Hams..... | 15 |
| Smoked..... | 15 1/2 |
| Boiled Picnic Hams..... | 11 |
| Cooked Loin Rolls..... | 17 1/2 |

BARRELED BEEF AND PORK.

| | |
|---------------------------|---------------|
| Extra Plate Beef..... | Per bbl |
| Plate Beef..... | 8.00 |
| Extra Mess Beef..... | 8.50 |
| Prime Mess Beef..... | 9.00 |
| Beef Hams..... | 18.25 @ 18.50 |
| Rump Butts..... | 9.00 |
| Mess Pork (repacked)..... | 12.00 @ 12.50 |
| Clear Fat Backs..... | 12.50 @ 13.00 |
| Family Back Pork..... | 13.25 |
| Bean Pork..... | 10.50 |

Dry Salt Meats.

| | |
|-----------------------------------|----------|
| Clear Bellies, 14/16 average..... | 7.62 1/2 |
| Rib Bellies..... | 7.50 |
| Fat Backs..... | 8.75 |
| Regular Plates..... | 5.75 |
| Short Clears..... | 5.75 |

CORNED, BOILED AND ROAST BEEF.

| | |
|--------------------------------|----------|
| | Per doz. |
| 1 lb. 2 doz. to case..... | \$1.25 |
| 2 lb. 1 or 2 doz. to case..... | 2.30 |
| 1 lb. 1 doz. to case..... | 4.85 |
| 6 lb. 1 doz. to case..... | 8.00 |
| 1 lb. 1/4 doz. to case..... | 18.00 |

EXTRACT OF BEEF.

| | |
|----------------------------------|----------------|
| | Per doz. |
| 1 oz. jars 1 dozen in box..... | \$2.50 |
| 2 oz. jars 1 dozen in box..... | 3.50 |
| 4 oz. jars 1 dozen in box..... | 6.50 |
| 8 oz. jars 1/2 dozen in box..... | 11.00 |
| 6 oz. jars 1/2 dozen in box..... | 22.00 |
| 2, 5 and 10 lb. tins..... | \$1.75 per lb. |

LARD.

| | |
|--|------------------------|
| Pure leaf, kettle rendered, per lb. tes..... | 8 |
| Lard substitute, tes..... | 8 |
| Lard compound..... | 5 1/4 |
| Barrels..... | 1/4c. over tes. |
| Half barrels..... | 1/4c. over tes. |
| Tubs, from 10 to 80 lb..... | 1/4c. to 1c. over tes. |
| Cooking Oil, per gal..... | 35c |

BUTTERINE.

F. O. B. CHICAGO.

| | |
|---------------------------|----------|
| No. 1, natural color..... | @ 10 |
| No. 2, "..... | @ 11 1/4 |
| No. 3, "..... | @ 12 |
| No. 4, "..... | @ 13 |
| No. 5, "..... | @ 14 |
| No. 6, "..... | @ 15 |

SAUSAGE CASINGS.

| | |
|---------------------------------|---------------|
| Beef round, set of 100 ft..... | 18 1/4 @ 14 |
| Beef middles, set of 57 ft..... | 27 1/4 @ 38 |
| Beef bungs, each..... | 8 1/4 @ 6 1/2 |
| Hog casings, per lb salt..... | 24 1/4 @ 25 |
| Hog bungs, exports, each..... | 5 @ 9 1/4 |
| " " medium, each..... | 5 @ 9 1/4 |
| " " small, each..... | 5 @ 9 1/4 |
| Sheep casings, per bundle..... | 60 @ 65 |
| Imported, medium to wide..... | 60 @ 65 |

FERTILIZERS.

| | |
|--|-----------------|
| Dried blood, per unit..... | @ 2.40 |
| Hoof meal, per unit..... | @ 2.30 |
| Concent. tank, 15 to 165 per unit..... | @ 2.15 |
| Ground tank, 10 to 115 per unit..... | 2.15 @ 10c. |
| Unground tank, 10 to 115 per unit..... | 2.07 1/4 @ 10c. |
| Unground tank, 9 and 30x, ton..... | 21.00 |
| Unground tank, 6 and 30x, ton..... | 14.50 |
| Ground raw bone, per ton..... | 25.00 |
| Ground steam bone, per ton..... | 17.00 |

HORNS, HOOFS AND BONES.

| | |
|--|----------|
| Horns, No. 1, 65 to 70 lb, avg. ton..... | \$275.00 |
| Horns, black, per ton..... | 25.00 |
| Horns, striped, per ton..... | 30.00 |
| Horns, white, per ton..... | 45.00 |
| Round shin Bones, 35 to 40 lb, avg. ton..... | 40.00 |
| Round shin Bones, 50 to 55 lb, avg. ton..... | 40.00 |
| Long Thigh Bones, 90 to 95 lb, avg. ton..... | 90.00 |

LARDS.

| | |
|-------------------------|---------|
| Prime steam, cash..... | @ 6.30 |
| Prime steam, loose..... | 5.75 |
| Neutral..... | @ 6 1/2 |
| Compound..... | @ 5 1/4 |

STEARINES.

| | |
|----------------|-----------|
| Oleo..... | 5 1/4 @ 6 |
| Lard..... | 7 @ 7 |
| Grease, W..... | 4 1/2 @ 5 |
| Grease, B..... | 4 1/2 @ 5 |
| Grease, Y..... | 4 @ 4 1/4 |
| Tallow..... | 4 1/2 @ 5 |

OILS.

| | |
|--|---------------|
| Lard Oil, extra winter strained tes..... | 50 @ 50 |
| Lard Oil, No. 1..... | 39 @ 40 |
| Lard Oil, No. 2..... | 37 @ 38 |
| Oleo Oil, extra..... | 7 @ 7 1/4 |
| Oleo Oil No. 2..... | 6 1/2 @ 6 1/2 |
| Neatsfoot Oil, pure tes..... | 65 @ 68 |
| Tallow..... | 47 @ 49 |

TALLOW.

| | |
|---------------------|---------------|
| Packers' prime..... | 4 1/2 @ 4 1/2 |
| No. 2..... | 3 1/2 @ 3 1/2 |
| Edible..... | 4 1/2 @ 5 |
| City renderers..... | 4 @ 4 |

GREASE.

| | |
|----------------|---------------|
| Brown..... | 3 @ 3 1/2 |
| Yellow..... | 3 1/2 @ 3 1/2 |
| White, A..... | 4 1/2 @ 4 1/2 |
| Bone..... | 3 1/2 @ 3 1/2 |
| House..... | 4 @ 4 1/4 |
| White "B"..... | 4 @ 4 1/4 |

CURING MATERIALS.

| | |
|--|---------------|
| Redden saltpetre..... | 4 1/2 @ 5 1/4 |
| Boric acid, crystals to powdered..... | 10 1/2 @ 11 |
| Borax..... | 7 1/2 @ 8 |
| Sugar..... | |
| Pure, open kettle..... | 3 1/2 |
| White, clarified..... | 4 1/2 |
| Plantation, granulated..... | 4 1/2 |
| Yellow, clarified..... | 4 1/2 |
| Salt..... | |
| Ashton, in bags, 224 lb..... | \$2.85 |
| Eng. packing, in bags, 224 lb..... | 1.45 |
| Michigan, medium, car lots, per ton..... | 3.60 |
| Michigan, granulated, car lots, per ton..... | 2.65 |
| Casing salt, bbls, 280 lb., 2X and 3X..... | 0.95 |

COOPERAGE.

| | |
|-------------------|--------|
| Tierces..... | @ 1.35 |
| Barrels, Oak..... | @ 1.10 |
| Ash..... | @ 0.95 |

COTTONSEED OILS.

| | |
|----------------------------|------|
| F. S. Y., in tanks..... | @ 20 |
| Prime Crude, in tanks..... | @ 24 |
| Butteroli, in lbs..... | @ 32 |

NEW YORK CITY

LIVE CATTLE.

| | |
|---|-------------|
| Good to choice native steers..... | \$5.25@5.70 |
| Medium to fair native steers..... | 4.70@5.20 |
| Poor to ordinary native steers..... | 4.00@4.60 |
| Oxen and stags..... | 2.75@5.00 |
| Bulls and dry cows..... | 1.75@4.10 |
| Good to choice native steers one year ago.. | 5.00@5.40 |

LIVE CALVES.

| | |
|---------------------------------------|----------------------|
| Live veal calves, a few selected..... | 100 lb @ 6 1/4 |
| Live veal calves, good to prime..... | 100 lb 5 1/4 @ 6 1/4 |

LIVE HOGS.

| | |
|--|-----------|
| Hogs heavy weights (per 100 lbs.)..... | 5.20@5.30 |
| Hogs, medium..... | 5.25@5.30 |
| Hogs, light to medium..... | 5.20@5.30 |
| Pigs..... | 5.30@5.35 |
| Roughs..... | 4.30@4.35 |

LIVE SHEEP AND LAMBS.

| | |
|-----------------------------------|-------------------|
| Spring lambs, selected..... | per lb 8 1/4c |
| Spring lambs, good to choice..... | per lb 8 |
| Spring lambs, culls..... | 6 |
| Sheep, selected..... | per 100 lb. 5 1/4 |
| Sheep, medium to good..... | per 100 lb. 5 |
| Sheep, culls..... | per 100 lb. 4 |
| Clip lambs..... | 7.40 |
| Medium..... | 6 1/4 |
| Clip sheep..... | 5 1/4 |
| Medium..... | 4 1/2 |

DRESSED BEEF.

CITY DRESSED.

| | |
|-----------------------------|---------------|
| Choice native, heavy..... | 8 1/4 @ 9 |
| Choice native, light..... | 8 1/4 @ 8 1/4 |
| Common to fair, native..... | 7 1/4 @ 8 1/4 |

WESTERN DRESSED BEEF.

| | |
|------------------------------------|---------------|
| Choice native, heavy..... | 8 @ 8 1/4 |
| Choice native, light..... | 7 1/4 @ 7 3/4 |
| Native, com. to fair..... | 6 1/2 @ 7 1/4 |
| Choice Western, heavy..... | 7 1/4 @ 7 3/4 |
| Choice Western, light..... | 6 1/2 @ 7 1/4 |
| Common to fair, Texan..... | 6 1/4 @ 7 |
| Good to choice beefers..... | 7 1/4 @ 7 3/4 |
| Common to fair beefers..... | 7 @ 7 1/4 |
| Choice cows..... | 7 1/4 @ 7 3/4 |
| Common to fair cows..... | 6 @ 6 3/4 |
| Good to choice oxen and stags..... | 7 @ 7 1/4 |
| Common to fair oxen and stags..... | 6 1/4 @ 6 3/4 |
| Freshy Holstein bulls..... | 5 1/4 @ 6 |
| Fresh pork loins, Western..... | 8 @ 10 |

DRESSED CALVES.

| | |
|---|-----------------|
| Veals, city dressed, prime, per lb..... | 10 1/4 @ 11 1/4 |
| Veals, good to choice, per lb..... | 10 @ 11 1/4 |
| Calves, country dressed, prime, per lb..... | 9 @ 10 |
| Calves, country dressed, fair to good..... | 7 @ 9 |
| Calves, country dressed, common..... | 6 @ 7 1/4 |

DRESSED HOGS.

| | |
|-------------------|---------------|
| Pigs..... | 7 1/4 @ 7 3/4 |
| Hogs, heavy..... | 6 @ 6 1/4 |
| Hogs, 180 lb..... | 6 @ 6 1/4 |
| Hogs, 160 lb..... | 6 1/4 @ 6 3/4 |
| Hogs, 140 lb..... | 6 @ 6 1/4 |

DRESSED SHEEP AND LAMBS.

| | |
|----------------------------|-----------------|
| Spring lambs, choice..... | per lb 14 @ 15 |
| Spring lambs, good..... | 14 @ 14 |
| Spring lambs, culls..... | 13 @ 13 |
| Sheep, choice..... | 10 1/4 @ 10 1/4 |
| Sheep, medium to good..... | 10 @ 10 |
| Sheep, culls..... | 9 @ 9 |

PROVISIONS.

(Jobbing Trade)

| | |
|---------------------------------------|----------|
| Smoked hams, 10 lb average..... | @ 11 1/4 |
| Smoked hams, 12 to 14 lb average..... | @ 11 |
| Smoked hams, heavy..... | @ 11 |
| California hams, smoked, light..... | @ 8 1/4 |
| California hams, smoked, heavy..... | @ 8 |
| Smoked bacon, boneless..... | @ 11 1/4 |
| Smoked bacon (rib in)..... | @ 10 1/4 |
| Dried beef salted..... | @ 13 |
| Smoked beef tongues, per lb..... | @ 14 |
| Smoked shoulders..... | @ 7 1/4 |
| Pickled bellies, heavy..... | @ 6 1/4 |

BONES, HOOFS, HAIR AND HORNS.

| | |
|--|-----------|
| Round shin bones, av. 50-60 lb cut, per 100 bones, per 2,000 lb..... | \$55.00 |
| Flat shin bones, av. 40-45 lb cut, per 100 bones, per 2,000 lb..... | 40.00 |
| Thigh bones, av. 90-95 lb cut, per 100 bones, per 2,000 lb..... | 75.00 |
| Horns..... | 15.00 |
| Horns, 7 1/4 oz. and over, steers, first quality..... | 270 @ 250 |

BUTCHERS' SUNDRIES.

| | |
|--------------------------------|------------------------|
| Fresh steer tongues..... | 50c to 75c a piece |
| Fresh Cow Tongues..... | 35c to 50c a piece |
| Calves' head, scalded..... | 30c to 40c a piece |
| Sweet breads, veal..... | 25c to 75c a pair |
| Sweet breads, beef..... | 16c to 18c a lb |
| Calves' livers..... | 25c to 50c a piece |
| Beef kidneys..... | 7c to 12c a piece |
| Mutton kidneys..... | 1 1/2 to 2 1/2 a piece |
| Livers, beef..... | 4c to 6c a lb |
| Oxtails..... | 5c to 7c a piece |
| Hearts, beef..... | 10c to 15c a piece |
| Rolls, beef..... | 10c to 12c a lb |
| Tenderloin, beef, Western..... | 15c to 25c a lb |
| Lamb's fries..... | 9c to 10c a pair |
| Fresh pork loins, city..... | 9 1/4 @ 10 |
| Fresh pork loins, Western..... | 9 @ 10 |

BUTCHERS' FAT.

| | |
|---------------------------|-------|
| Ordinary shop fat..... | 2 @ 3 |
| Suet, head and heavy..... | 3 @ 5 |
| Shop bones, per cwt..... | @ 25 |

PICKLED SHEEPSKINS.

| | |
|-----------------------------|------------|
| XXX sheep, per dozen..... | @ \$5.75 |
| XX sheep, per dozen..... | @ 4.50 |
| X sheep, per dozen..... | @ 3.75 |
| Blank Ribby sheep..... | @ 3.75 |
| Sheep, ribby..... | @ 3.12 1/2 |
| XX lambs, per dozen..... | @ 4.50 |
| X lambs, per dozen..... | @ 3.50 |
| No. 1 lambs, per dozen..... | @ 3.00 |
| No. 2 lambs, per dozen..... | @ 2.00 |
| Culls, lambs..... | @ 75 |

SAUSAGE CASINGS.

| | |
|---|-----------|
| Sheep, imp., wide, per bundle..... | 80 |
| Sheep, imp., wide, per keg, 50 bundles..... | \$40.00 |
| Sheep, imp., medium, per bundle..... | 60 |
| Sheep, imp., per bundle, narrow..... | 44 |
| Sheep, imp., Russian Rings..... | 42 |
| Hog, American, in tes. or bbls., per lb., F.O.B. Hog, American, kegs, per lb., F.O.B..... | 42 |
| Beef, rounds, per set, f. o. b. Chicago..... | 12 |
| Beef, rounds, per set, f. o. b. N. Y..... | 13 |
| Beef, buns, per lb..... | 2 |
| Beef, buns, piece, f. o. b. N. Y..... | 5 |
| Beef, middles, per set, f. o. b. Chicago..... | 35 |
| Beef, middles, per set, f. o. b. N. Y..... | 37 |
| Beef, wassands, per 1,000, No. 1's..... | @ 6 1/4 |
| Beef wassands, per 1,000, No. 2's..... | 2 1/4 @ 3 |

SPICES.

| | Whole. | Ground |
|----------------------------|--------|--------|
| Pepper, Sing., white..... | 20 1/4 | 21 1/4 |
| Pepper, Sing., black..... | 13 | 14 |
| Pepper, Penang, white..... | 20 | 21 |
| Pepper, red, Zanzibar..... | 16 | 19 |
| Pepper, shot..... | 15 | 19 |
| Allspice..... | 07 1/4 | 10 |
| Coriander..... | 06 1/4 | 07 |
| Cloves..... | 18 | 20 |
| Mace..... | 35 | 60 |

SALTPETRE.

| | |
|---------------|---------------|
| Crude..... | 3 1/4 @ 3 3/4 |
| Refined..... | 4 1/4 @ 4 1/4 |
| Crystals..... | 4 1/4 @ 5 1/4 |
| Powdered..... | 4 1/4 @ 5 |

THE GLUE MARKET.

| | |
|------------------|--------|
| A extra..... | 21 |
| I extra..... | 17 |
| 1 extra..... | 16 |
| IX moulding..... | 15 |
| 1 1/4..... | 14 1/2 |
| 1 1/2..... | 14 |
| 1 3/4..... | 12 |
| 2..... | 11 |
| 2 1/2..... | 10 |
| 3..... | 9 |
| 4..... | 8 |

GREEN CALFSKINS.

| | |
|----------------------------------|------------|
| No. 1 calfskins..... | per lb .14 |
| No. 1 calfskins, buttermilk..... | .12 |
| No. 1 calfskins, 12-14..... | each 1.50 |
| No. 2 calfskins, buttermilk..... | .10 |
| No. 2 calfskins, 12 1/2-14..... | piece 1.30 |
| No. 1 grassers..... | per lb .12 |
| No. 2 grassers..... | per lb .00 |

| | |
|-------------------------------------|------------|
| No. 1 heavy kips, 18 lb and up..... | piece 1.90 |
| Ticky kips, 18 lb and up..... | piece 1.40 |
| No. 2 heavy kips, 18 lb and up..... | piece 1.85 |
| No. 1 kips, 14-18 lb..... | piece 1.70 |
| No. 2 kips, 14-18 lb..... | piece 1.60 |
| No. 1 grass kips..... | piece 1.50 |
| No. 2 grass kips..... | piece 1.35 |
| Ticky kips..... | piece 1.00 |
| Branded heavy kips..... | piece 1.10 |
| Branded kips..... | piece .90 |
| Branded skins..... | piece .50 |

DRESSED POULTRY.

FRESH KILLED-ICED.

| | |
|---|-------------|
| Turkeys—West'n, young hens, average run..... | 15 @ 16 |
| West'n, young toms, average run..... | 15 @ 16 |
| Old hens and toms..... | 15 @ 15 1/4 |
| Common..... | 12 @ 14 |
| Broilers—Phila., 3 lbs. and under to pair, fancy, per lb..... | 45 @ 50 |
| Phila., 3 1/4 to 4 lbs. to pair, per lb..... | 35 @ 40 |
| Fa., 3 & 4 lbs. to pair, fancy, per lb..... | 30 @ 40 |
| Fowls—Ohio & Mich., scalded, small..... | @ 13 |
| West'n, dry-picked, av'ge run, small..... | @ 12 1/2 |
| West'n, scalded, av'ge run, small..... | @ 13 |
| Western, heavy..... | @ 12 1/4 |
| Old Cocks, per lb..... | 9 @ 9 1/4 |
| Squabs—Prime, large, white, per dozen..... | @ 2.50 |
| Mixed, per dozen..... | @ 2.25 |
| Dark, per dozen..... | @ 1.50 |

FROZEN.

| | |
|--|-------------|
| Turkeys—Hens, No. 1..... | @ 19 |
| Toms, No. 1..... | 19 1/4 @ 20 |
| Capons, per lb..... | @ 20 |
| Broilers—Dry-picked..... | 19 @ 20 |
| Scalded..... | 16 @ 18 |
| Chickens—Roasting, soft meat, fancy..... | 17 @ 18 |
| Average No. 1..... | 14 @ 15 |
| No. 2..... | 11 @ 12 |
| Fowls—No. 1..... | @ 13 |
| Ducks—No. 1..... | 12 @ 14 |
| Geese—No. 1..... | 11 @ 12 |

LIVE POULTRY.

| | |
|--|-------------|
| Spring chickens, nearby, per lb..... | 23 @ 25 |
| Fowls, per lb..... | @ 14 |
| Roosters, per lb..... | @ 9 1/4 |
| Turkeys, per lb..... | @ 12 |
| Ducks, average, Western, per pair..... | 80 @ 90 |
| Geese, Western, per pair..... | 1.00 @ 1.25 |
| Live Pigeons, per pair..... | 35 @ 40 |

FERTILIZER MARKETS.

BASIS, NEW YORK DELIVERY.

| | |
|---|-----------------|
| Bone meal, steamed, per ton..... | \$22.00 @ 23.00 |
| Bone meal, raw, per ton..... | 25.00 @ 25.50 |
| Nitrate of soda—future..... | 2.12 1/2 @ 2.15 |
| Nitrate of soda..... | 2.25 @ 2.30 |
| Bone black, spot, per ton..... | 15.50 ch |
| Dried blood, N. Y., 12-13 per cent. ammonia..... | 2.55 @ 2.60 |
| Dried blood, West, high grade, fine ground, c. f., N. Y..... | 2.75 @ 2.80 |
| Tankage, 0 and 20 p. c., f. o. b. Chicago..... | 21.00 @ 22.00 |
| Tankage, 5 and 20 p. c., f. o. b. Chicago..... | 18.00 @ 19.00 |
| Tankage, 7 and 30 p. c., f. o. b. Chicago..... | 15.00 @ 16.00 |
| Tankage, 6 and 35 p. c., f. o. b. Chicago..... | 15.00 @ 16.00 |
| Garbage tankage, f. o. b. New York..... | 8.00 @ 9.00 |
| Fish scrap, dried, 11 p. c. ammonia and 15 p. c. bone phosphate..... | 29.00 @ 30.00 |
| Wet, acidulated, 6 p. c. ammonia, per ton..... | 14.00 @ 15.00 |
| Asotone, per unit, del. New York..... | 2.80 @ 2.85 |
| Sulphate ammonia gas, for shipment, per 100 lbs..... | 3.10 @ 3.15 |
| Sulphate ammonia gas, per 100 lbs., spot..... | @ 3.30 |
| Sulphate ammonia bone, per 100 lbs..... | 3.05 @ 3.10 |
| So. Carolina phosphate rock, ground, per 2,000 lbs., f. o. b. Charleston..... | 6.50 @ 7.75 |
| So. Carolina phosphate rock, undried, f. o. b. Ashley River, per 2,400 lbs..... | 8.50 @ 8.75 |
| The same, dried..... | 3.75 @ 4.00 |

POTASHES, ACCORDING TO QUANTITY.

| | |
|--|---------------|
| Kalnit, shipment, per 2240 lbs..... | \$8.95 @ 9.50 |
| Kalnit, ex-store, in bulk..... | 9.00 @ 10.05 |
| Kieserit, future shipment..... | 7.00 @ 7.35 |
| Muriate potash, 80 p. c., ex-store..... | 1.85 @ 1.95 |
| Muriate potash, 80 p. c., future shipment..... | 1.80 @ 1.90 |
| Double manure salt (40@49 p. c., less than 2 1/4 p. c. chloride), to arrive, per lb. (basis 48 p. c.)..... | 1.00 @ 1.13 |
| Sulphate potash, to arrive (basis 80 p. c.)..... | 2.00 @ 2.30 |
| Sylvinit, 24 to 36 p. c., per unit, S. F..... | .30 @ .40 |

LIVE STOCK REVIEWS

CHICAGO

(Special to The National Provisioner from the Bowles Live Stock Commission Company.)

CATTLE.—Receipts of cattle the first three days this week, 41,714, being about 7,000 less than the same period last week. The trade at the last half of last week continued to advance and a liberal run is expected Monday, and the trade was much surprised when only about 17,000 cattle arrived. The market was excited and unevenly higher, prices showing an advance of 10@25c., and averaged more than 15c. higher than last week's closing prices. Top cattle reached \$5.90, which price was obtained for one load of 1,283-lb. Angus steers from Edina, Mo., sold by Bowles Live Stock Commission Co. Several other loads averaging upward of 100 lb. heavier sold at the same price. Receipts Tuesday 4,452, market unchanged; estimated receipts to-day 20,000; market strong to 15c. higher. Top cattle to-day sold at 6.10, but best steers to-day were a better quality than tops Monday. A load of 1,399-lb. Angus sold at 6.05 and several loads of prime 1,440-lb. to 1,489-lb. steers sold at 6.00. A long list of good to choice cattle sold from 5.60@5.85 and more than one-half of the beef steers sold upward of 5.35. Short fed and unfinished steers, 4.60 @5.25, and inferior light killers down to 4.20. Market closed very strong, values the highest since last December. Butcher stock was steady, fancy heifers, 4.75@5.25; choice, 4.25@4.70; best cows in full loads, 5.00. Good to choice, 4 @4.50; bulk of the fat cows and heifers, 3.25 @4.00. Canners and cutters, 1.50@2.90. Bulls, 2.25@4.40; exporters, 3.75@4.25; bolognas, 2.90@3.40. Best veal calves, 5.50@5.75; bulk, 4.75@5.25. Common down to 3.25. Stockers and feeders in very light supply. Fleishy feeders have been going to the killers since the recent upturn in the market. The supply is light and the demand is light. Prices continue high. Best heavy feeders going to the country at 4.90. Good kinds largely 4.50 @4.75; medium, 3.60@4.00. There is a very strong undertone to the cattle market and best steers are expected to sell at 6.50 this month.

HOGS.—Receipts of hogs this week increased 1,300. Daily receipts were Monday 38,233, Tuesday 18,467, Wednesday (estimated) 38,000. Market has fluctuated within a narrow range, price showing slight change from a week ago. Early quotations to-day were 5 high, best hogs at 4.85, but the market weakened and closed with the advance lost. One of the principal packers' droves cost 4.68 or 1c. more than yesterday. A big shipping drove averaging 260 lb. cost 4.70. A big string of butcher weights at 4.76 and selected light weights 4.67½@4.70. Choice mixed hogs sold largely from 4.60@4.75. Heavy packers, 4.55@4.70; light bacon sorts, 4.60@4.65; best, 4.70. Pigs, 4.00@4.25. Heavy packers, 4.65@4.70. The average cost price of hogs to-day 4.69 against 4.66 Tuesday, 4.54 a week ago and 6-9 a year ago. There is a weak undertone to the market.

SHEEP.—Receipts were rather heavier than looked for this week; market received a severe setback on medium grades of both sheep and lambs and heavy ewes. A decline of 25 @35c. per cwt. noted on heavy ewes with tops selling at 5.20 to-day. Some prime export wethers yesterday at 5.80, which is an outside figure. Choice yearling lambs up to 6.60, the bulk of the natives selling at 5.75@6.25. Yearling wethers at 5.50@5.75. Spring lambs selling at from 6@7c., with an occasional prime bunch up to 7.50. Bucks, 3.00@3.50.

ST. JOSEPH

(Special to The National Provisioner.)

South St. Joseph, Mo., May 31.—For the first time in over two weeks the beef steer trade suffered a relapse, the heavy and common and medium lights selling at a loss of 10c., with the 40c. to 60c. advance noted at the close of last week, while well-fatted light and handy weights held fully steady. Monday the top was \$5.60, with the bulk of the offerings going at a range of from \$5.20 to \$5.50. Medium and fairly good grade of cows and heifers showed a decline of 10c. to 15c., with the 25c. to 35c. higher range of late last week, but best kinds and canners sold steady. Heifers topped the market Monday at \$5.30 and cows brought \$4.65. The improved tone to the fat cattle market has encouraged the country to show more interest in stock cattle of the right kind, and prices for good to choice steers that averaged around 500 pounds and stronger, especially for those of 900 to 1,000 pounds, gained 15c. to 25c., but common offerings are almost a drug on the market at the prevailing low range of values.

Since the middle of last week the trend of prices for hogs at this market has been upward, which was occasioned principally under light to moderate marketing, and the tops Tuesday were made at \$4.65, with the bulk of the sales going at \$4.50 to \$4.55, or the highest in two weeks. The quality of the offerings continues mostly desirable, and the average weight last week was the strongest in two weeks.

Arrivals in the sheep division last week and thus far this week were the smallest since the movement of corn-fed stock first began, which indicates that fed stock is mighty scarce, and that packers will have meagre supplies between now and the opening up of the Western range season, which will not be until after the 1st of July. Colorado feed lots are emptied, Kansas has nothing of note back, Nebraska will have marketed all in a few days, and native stock seems to be unusually scarce, while the receipts from Texas have not amounted to much thus far this season. Late last week Colorado woolled lambs sold at \$7.20, native shorn grades \$6.50, native woolless yearlings at \$6, native wethers, without wool, at \$5.75, and native clipped ewes at \$5.35, which prices were the highest of the season. Texas went at \$4.85. Since then, however, owing to the lower markets east, prices for lambs have broken 10c. to 15c., but sheep sold fully steady.

KANSAS CITY

(Special to The National Provisioner.)

Kansas City, June 3.

CATTLE.—Receipts this week were 23,500; last week, 25,200; same week last year, no receipts on account of the flood. The cattle market received a slight setback Wednesday, but is still higher than a week ago. Beef steers are 15 to 25c. higher. Top price this week is \$5.85; butcher stuff 10 to 15c. higher than last week. Best heifers, \$5.35; cows, \$4.60; western steers, \$5.50. Feeders are 15c. higher on account of the better fat cattle market, and bring up to \$4.70. Stockers have sold quietly and are about steady with last week. Quarantine fed steers are 20c. higher, but grass steers are no better than last week. Veal calves are still dull. The best bring \$4.75.

HOGS.—Receipts this week, 45,400; last week, 45,700; same week last year, no receipts on account of the flood. Hog prices are 10c. higher than a week ago. Market is strong to-day, with a top of \$4.67½. Bulk of sales, \$4.50 to \$4.60. Quality has averaged good, although a good many common light hogs have been included. Packers consider quality more than weight just now. Good shipping demand has helped light hogs, which decline rapidly when this demand is absent. Otherwise fluctuations have been small.

SHEEP.—Receipts this week were 17,700; last week, 18,500; same week last year, no receipts on account of the flood. Native and western sheep and lambs are steady with a week ago, but Texas muttons, of which the supply largely consists, are 10 to 15c. lower than a week ago. A few feeding sheep have arrived and were readily placed. Quality of natives has been good. Woolled western lambs bring \$7.25; clipped lambs, \$6.15; yearlings, \$5.75; ewes, \$5.35. Texas muttons up to \$4.70.

HIDES remain unchanged; green salted, 7½; dry flint butcher, 15½; fallen, 14; under 16, 12½; sheep pelts, 10; wool, 16 to 22.

PACKERS PURCHASES THIS WEEK.

| | Cattle. | Hogs. | Sheep. |
|--------------------|---------|--------|--------|
| Armour | 3,752 | 16,963 | 5,248 |
| Cudahy | 3,622 | 10,348 | 2,087 |
| Fowler | | | |
| Ruddy | 678 | 72 | 809 |
| Schwarschild | 3,589 | 5,575 | 2,713 |
| Swift | 3,212 | 6,801 | 3,218 |

HOGS SLAUGHTERED.

Special reports to The National Provisioner show the number of hogs slaughtered at the following centers for the week ending May 28:

| | |
|--------------------------------|---------|
| Chicago | 113,305 |
| Omaha | 63,783 |
| Kansas City | 41,240 |
| St. Joseph | 31,564 |
| St. Louis | 26,445 |
| Cudahy | 10,387 |
| Sioux City | 11,614 |
| Ottumwa | 16,514 |
| Cleveland | 12,500 |
| Cedar Rapids | 9,555 |
| Wichita | 5,924 |
| Nebraska City | 7,404 |
| Bloomington | 1,864 |
| South St. Paul | 29,930 |
| Cincinnati | 10,161 |
| Indianapolis | 24,460 |
| Louisville | 8,494 |
| New York and Jersey City | 31,081 |
| Detroit | 5,675 |
| Buffalo | 56,490 |
| Denver | 842 |

CATTLE SLAUGHTERED.

Special reports to The National Provisioner show the number of cattle slaughtered at the following centers for the week ending May 28:

| | |
|---------------------------|--------|
| Chicago | 34,690 |
| Omaha | 12,302 |
| Kansas City | 15,661 |
| St. Joseph | 6,645 |
| St. Louis | 9,861 |
| Cudahy | 404 |
| Sioux City | 1,161 |
| Wichita | 449 |
| South St. Paul | 921 |
| Cincinnati | 2,931 |
| Louisville | 1,060 |
| New York and Jersey | 6,956 |
| Detroit | 1,139 |
| Buffalo | 9,745 |
| Denver | 1,163 |

SHEEP SLAUGHTERED.

Special reports to The National Provisioner show the number of sheep slaughtered at the following centers for the week ending May 28:

| | |
|--------------------------------|--------|
| Chicago | 56,353 |
| Omaha | 11,540 |
| Kansas City | 15,924 |
| St. Joseph | 8,655 |
| St. Louis | 20,666 |
| Cudahy | 273 |
| Sioux City | 230 |
| South St. Paul | 2,268 |
| Cincinnati | 3,246 |
| New York and Jersey City | 28,602 |
| Detroit | 1,163 |
| Buffalo | 49,200 |
| Denver | 1,102 |

NEW YORK LIVESTOCK.

WEEKLY RECEIPTS TO MAY 30, 1904.

| | Bees. | Cows. | Calves. | Sheep. | Hogs. |
|-----------------------|-------|-------|---------|--------|--------|
| Jersey City..... | 1,654 | 2 | 4,513 | 23,841 | 11,584 |
| Sixtieth street..... | 722 | 50 | 12,708 | 4,764 | ... |
| Fortieth street..... | ... | ... | ... | ... | 16,202 |
| Lehigh Valley..... | 5,824 | ... | ... | ... | 3,295 |
| Weehawken..... | 1,185 | ... | ... | 1,338 | ... |
| Scattering..... | 64 | 78 | 27 | ... | ... |
| Totals..... | 9,387 | 116 | 17,290 | 29,980 | 31,081 |
| Totals last week..... | 9,457 | 150 | 17,741 | 29,266 | 28,792 |

WEEKLY EXPORTS.

| | Live cattle. | Live sheep. | Qrs. of beef. |
|--|--------------|-------------|---------------|
| Schwarzschild & S., Ss. Bovie..... | 434 | ... | ... |
| Schwarzschild & S., Ss. Mesaba..... | 300 | ... | 2,213 |
| Schwarzschild & S., Ss. St. Andrew..... | 304 | ... | ... |
| Schwarzschild & S., Ss. Idaho..... | 250 | ... | ... |
| J. Shamburg & Son, Ss. Bovie..... | 425 | 1,338 | ... |
| J. Shamburg & Son, Ss. Mesaba..... | 300 | ... | ... |
| J. Shamburg & S., Ss. St. Andrew..... | 304 | ... | ... |
| J. Shamburg & Son, Ss. Idaho..... | 130 | ... | ... |
| J. Shamburg & S., Ss. Coeur d'Alene..... | 60 | ... | ... |
| Swift Beef Co., Ss. Majestic..... | ... | ... | 1,200 |
| Morris Beef Co., Ss. Bovie..... | ... | ... | 2,500 |
| Morris Beef Co., Ss. Majestic..... | ... | ... | 1,000 |
| Morris Beef Co., Ss. Arabic..... | ... | ... | 1,500 |
| Morris Beef Co., Ss. St. Louis..... | ... | ... | 1,200 |
| Armour & Co., Ss. Bovie..... | ... | ... | 1,500 |
| Armour & Co., Ss. Arabic..... | ... | ... | 1,200 |
| Armour & Co., Ss. St. Louis..... | ... | ... | 1,200 |
| G. H. Hammond & Co., Ss. Bovie..... | ... | ... | 500 |
| Cudahy Packing Co., Ss. Etruria..... | ... | ... | 1,500 |
| Miscellaneous, Ss. Pretoria..... | 10 | 40 | ... |
| Total exports..... | 2,547 | 1,378 | 17,422 |
| Total exports last week..... | 1,671 | 1,194 | 14,359 |
| Boston exports this week..... | 3,450 | 3,383 | 11,130 |
| Baltimore exports this week..... | 736 | ... | 826 |
| Philadelphia exports this week..... | 714 | ... | 942 |
| Portland exports this week..... | 705 | 1,341 | ... |
| Montreal exports this week..... | 3,906 | 115 | ... |
| To London..... | 3,877 | ... | 2,216 |
| To Liverpool..... | 4,702 | 5,091 | 24,698 |
| To Glasgow..... | 1,492 | 115 | ... |
| To Manchester..... | 645 | 971 | ... |
| To Antwerp..... | 668 | ... | ... |
| To Hull..... | 109 | ... | ... |
| To Southampton..... | ... | ... | 3,406 |
| To Avonmouth..... | 350 | ... | ... |
| To Newcastle..... | 214 | ... | ... |
| To Para..... | 40 | ... | ... |
| To Manaoa..... | 20 | ... | ... |
| To Bermuda and West Indies..... | 10 | 40 | ... |
| Totals to all ports..... | 12,118 | 6,217 | 30,320 |
| Totals to all ports last week..... | 12,364 | 3,732 | 21,248 |

RECEIPTS AT CENTERS.

SATURDAY, MAY 28.

| | Cattle. | Hogs. | Sheep. |
|------------------|---------|--------|--------|
| Chicago..... | 300 | 12,000 | 3,000 |
| Kansas City..... | 150 | 3,000 | 500 |
| Omaha..... | ... | 11,000 | 2,200 |

MONDAY, MAY 30.

| | | | |
|------------------|--------|--------|--------|
| Chicago..... | 16,000 | 37,000 | 17,000 |
| Kansas City..... | 5,000 | 7,000 | 3,000 |
| Omaha..... | 2,500 | 6,200 | 500 |

TUESDAY, MAY 31.

| | | | |
|------------------|-------|--------|--------|
| Chicago..... | 3,500 | 22,000 | 12,000 |
| Kansas City..... | 7,000 | 8,000 | 4,000 |
| Omaha..... | 4,100 | 10,500 | 750 |

WEDNESDAY, JUNE 1.

| | | | |
|------------------|--------|--------|--------|
| Chicago..... | 22,000 | 3,500 | 18,000 |
| Kansas City..... | 6,000 | 10,000 | 3,000 |
| Omaha..... | 3,700 | 14,000 | 1,200 |

THURSDAY, JUNE 2.

| | | | |
|------------------|-------|--------|--------|
| Chicago..... | 7,000 | 32,000 | 10,000 |
| Kansas City..... | 5,000 | 8,000 | 2,000 |
| Omaha..... | 2,000 | 10,000 | ... |

FRIDAY, JUNE 3.

| | | | |
|------------------|-------|--------|-------|
| Chicago..... | 3,000 | 20,000 | 4,000 |
| Kansas City..... | 1,000 | 7,000 | 2,000 |
| Omaha..... | 2,000 | 9,000 | 1,200 |

CHEMICALS AND SOAPMAKERS' SUPPLIES.

74% Caustic Soda at \$1.80 to \$1.85 for 50%.

76% Caustic Soda at \$1.85 to \$1.90 for 60%.

60% Caustic Soda at 2c. per lb.

98% Powdered Caustic Soda at 3c. per lb.

58% Pure Alkali at 90c. to \$1 for 48%.

48% Carbonate Soda Ash at \$1.10 per 100 lbs.

Borax at 8c. per lb.

Talc at 1½c. per lb.

Palm Oil in casks 6c. lb., in barrels 6¾c. lb.

Green Olive Oil at 57c. to 58c. per gal.

Yellow Olive Oil at 54c. per gal.

Green Olive Oil Foots at 5¼c. lb.

Cochin Cocanout Oil at 7¼ to 7½c. lb.

Ceylon Cocanout Oil at 6½ to 6¾c. lb.

Cottonseed Oil at 30c. to 33c. per gal.

Corn Oil at 4c. per lb.

Rosin—M., \$4; N., \$4.10; WG., \$4.35; WW., \$4.50 per 280 lbs.

GENERAL MARKETS.

LARD IN NEW YORK.

Western steam, \$6.65; city steam, \$6.12½ @ \$6.25; refined continent, tes., \$6.85; do., South America, tes., \$7.50; do., kegs, \$8.50; compound, \$5.50 @ \$5.75.

HOG MARKETS JUNE 3.

CHICAGO.—Receipts, 20,000; strong to shade higher; \$4.35 @ \$4.80.

KANSAS CITY.—Receipts, 6,000; steady; \$4.30 @ \$4.60.

OMAHA.—Receipts, 10,000; steady to strong; \$4.40 @ \$4.60.

CLEVELAND.—Receipts, 50 cars; active; about \$4.75.

INDIANAPOLIS.—Receipts, 7,000; steady; \$4.50 @ \$4.80.

EAST BUFFALO.—Receipts, 40 cars; opened 10c. lower; \$4.85 @ \$4.95.

LIVERPOOL.

Liverpool, June 3.—(By cable)—Beef, extra India mess, 57s. 6d.; pork, prime mess, western, 62s. 6d.; shoulders, 35s. 6d.; hams, s. c. 45s.; bacon, e. c., 40s.; do., short ribs, 37s.; long clear, light, 36s. 6d.; do., heavy, 36s.; backs, 36s. 6d.; bellies, 38s. 6d.; turpentine, 42s. 9d.; rosin, common, 7s. 7½d.; lard, prime western, tes., 33s. 3d.; 28-lb. pails, 33s. 6d.; cheese, white, old, 40s.; do., new, 39s.; do., colored, old, 42s.; new, 39s.; American steam lard (Hamburg), 50 kilos, 32s.; tallow, 20s. 9d.; do., Australian (London), 24s. 3d.; cottonseed oil, refined (Hull), 19s. 1½d.; linseed oil (London), 15s. 6d.; petroleum, refined (London), 5 15-16d.

OLEO AND NEUTRAL LARD.

June is usually the lowest month for oleo oil, because at that time natural butter becomes plentiful both here and abroad, and for that reason it is likely there will be no improvement in the value of oleo during the present month. The Supreme Court in Washington decided this week in favor of the color law, and as a result of that butterine production in this country will be materially reduced.

Neutral lard is quiet and continues cheaper than oleo oil. Butter oil is more active and in better demand.

AMERICAN BUTTER GREASE.

The chief secretary to the Lord Lieutenant of Ireland has been asked whether his attention had been called to the sale of United States butter, called "American ladies," with the view of the Department of Agriculture in Ireland taking action to prevent its being made up and sold as Irish firkin butter; also whether he would inquire if this stuff was largely made of glucose and dextrine, and, if so, would the importation of it be stopped.

Mr. Wyndham stated that the attention of the department was directed to this substance in August last. It was ascertained that a quantity had been consigned to a Limerick trader, not as butter, but as "American butter grease." No evidence was obtained that the substance was placed on the market as Irish butter. The department was giving special attention to the matter, and if evidence of illegal sales was forthcoming vigorous action would be taken.

COTTONSEED OIL SITUATION.

(Special Letter to The National Provisioner from Aspegren & Co.)

There has been considerable buying of oil for export and for some consumption during the past week and a higher lard market has stimulated the demand. Prices have moved up somewhat, although the closings are only about ½ to 1c. higher than last week. Some June oil is being tendered, although not anything like the quantity expected. Everything seems to be well taken care of and there are no lots pressing for sale. The crude oil markets have improved somewhat and higher prices have been paid.

The trade agrees that the future course of the market will depend to a very great extent upon the ultimate course of the lard and tallow markets; an advance in these competitive fats would stimulate the demand for cottonseed oil considerably. We quote to-day as follows:

Prime summer yellow cottonseed oil, June, 28½c. sales; July, 29½c. asked and 29c. bid; August, 30½c. asked and 29¾c. bid; September, 31c. asked and 30½c. bid; October, 30½c. sales; November, 30c. sales; December, 29½c. sales; prime winter yellow cottonseed oil, 32c.; prime summer white cottonseed oil, 32c.; Hull quotation of cottonseed oil, 19c.; prime crude oil in tanks in the southeast, 21½c.; prime crude oil in tanks in the Mississippi Valley, 21½c.; prime crude oil in tanks in Texas, 20½c.

FRIDAY'S CLOSING.

Provisions.

Chicago hog receipts 20,000 and estimates for Monday only 11,000. Prices strong to a shade higher for the hogs. The products varied little in the early trading to-day, not more than 5 points, with some firmness here and there and a slacker tendency otherwise.

Cottonseed Oil.

Has a quiet look and in its general features is not changed from those outlined in our weekly review. Export demand is now very quiet. Prime yellow, in New York, stood nominally 28½c. for June, 29 @ 29½c. for July, 30c. bid and 30½c. asked for August, and 29½c. bid and 30c. asked for November and December.

Tallow.

The asking price for city, hhds., is 4¼c. While early in the week there was only 50 hhds. offered at that, yet at the close of it reprisals have been given to shippers of larger quantities at 4¼c., and they have not been accepted. There are reports of resales offered at a less price. Buyers do not care to pay over 4¼c., the basis of the last sales. The west and the country markets generally hold their late advance firmly, although they are quieter. At Chicago, prime packers, 4¼ @ 4½c.; edible, 4¾ @ 5c.; city renderers at 4½ @ 4¾c. House grease, 3½c.; white grease, 4¾c.; bone, 4c.

Oleo Stearine.

Last sales in New York at 5¼c. City pressers ask to 6c. Small sales in Chicago to tanners at 6c.

See Page 48 for
Want & For Sale Ads.

RETAIL SECTION

BUTCHER HANGS HIMSELF.

Louis Botham, a wealthy meat dealer of Wilkesbarre, Pa., committed suicide in his butcher shop last Friday morning by hanging. His body, suspended from a small piece of rope, was found hanging from a door.

MEAT WAR IN CALIFORNIA.

A meat war is on at Santa Ana, Cal., and the butchers are slashing prices. The war was precipitated by the action of a number of butchers in ceasing to trade with local wholesalers, who have supplied them for many years, and purchasing their meat from a Los Angeles firm, which gives them a reduction of from one-half to one cent a pound. Buckingham & Obarr, the local wholesalers, conduct a retail shop also, and they have forced the war by reducing the retail price of meat. However, they have raised the wholesale price of pork one cent per pound, and the retailers are forced to accept this because they cannot duplicate the price in Los Angeles.

TO CATCH OFFICIAL "DEADBEATS."

The Retail Grocers and Butchers' Associations, of St. Joseph, Mo., has written a letter to Mayor Spratt, asking that he do something to encourage "deadbeats" in the city's employ to pay their bills. He is asked to write a letter to the head of each department, urging him to make it known to the employees of that department that the city looks with disfavor upon any refusal or neglect to pay just bills. "Under the state law," says the letter, "retail merchants are not permitted to garnishee the wages of a city employee, a fact of which the employees in some instances take advantage. Similar requests have been made upon the Mayor of St. Louis and the Mayor of Kansas City, and both have complied, with good results."

Mayor Spratt has not made up his mind yet as to what action he will take.

"FOUR TRACK NEWS" FOR JUNE.

The June number of the "Four Track News" is full of matter interesting, not only to travelers, but to the general reader. Its table of contents is unusually long and its contributors include a number of well-known writers. The pleasures of summer are dealt with under various titles and include tales of the Adirondacks, of the Great Lakes, of the West, of the mountains and of the seashore. There is also much which will entertain the foreign traveler and the general reader will find entertainment in other articles not pertaining exclusively to travel. There are the usual interesting departments, poems, bits of humor, etc., and the illustrations are exceptionally attractive.

MORE DON'T'S FOR CLERKS.

A store manager with a lot of branch shops has compiled the following lengthy list of things he does not want his employees to do:

Don't make remarks about customers or criticize them in any way.

Don't talk about our competitors before a customer.

Don't wait on a customer with your finger nails in mourning or your hands dirty.

Don't address a customer by saying "You're next;" address her properly.

Don't promise anything you cannot do.

Don't allow a customer to stand and wait to get waited on, if it is possible to wait on her promptly.

Don't wait on customers as if you didn't care whether they bought goods or not.

Don't say you haven't an article in stock if you are not sure.

Don't forget when you wait on a customer to ask if there is anything else she wishes; never say, "Is that all?"

Don't be so persistent in trying to make a sale that you make yourself objectionable.

Don't misrepresent goods; you can generally judge from our ads. or price what they are.

Don't take an address for goods to be delivered without being positive it is correct.

Don't think it is too much trouble and say you are out of a thing or substitute another article for it rather than open a case or box.

Don't fail to remember that customers frequently hand you money and imagine it is a larger coin or note than it really is; make sure there is no mistake in this way, and be sure that you get and give the customer correct change.

Don't permit a customer to leave the store dissatisfied if it is within your power to please her.

Don't forget that it is a customer's patronage that pays your wages.

Don't give an ounce over or a fraction of an ounce short; weighing goods correctly is the first thing to learn in the business.

Don't forget to call out the amount of sales loudly and distinctly, and register it correctly, and use no slang names for money.

Don't forget to register the amount of sale immediately you receive the money; never hold the money in your hand while doing up a package; the quicker the money gets to the cashier the better.

Don't forget if a customer buys two or more articles to be sure and add them up on one of the packages.

Don't forget to add items up correctly; count the packages of goods and the items, and see if they agree.

Don't forget to charge customers for goods that they put in their baskets while you are waiting on them.

Don't forget when putting up an order that everything must be correct.

Don't forget to see that a bill is properly signed in every detail.

Don't make a practice of coming late to business; it is a sign you are not worth your wages.

Don't dress dowdily or dudishly; be neat. Don't wear soiled linen of any description.

Don't wear a collar a second day.

Don't think you are too good for the position you hold.

Don't forget that it does not cost a cent to be polite to everybody.

Don't permit envy or bad feeling to exist between you and other clerks; work together as if one person.

Don't forget all instructions must be obeyed and must be remembered.

Don't be disloyal to your firm; stand by it as long as you depend on it for your bread and butter.

Don't lose your temper.

Don't hum or whistle.

Don't chew tobacco.

Don't eat during business hours; wait until meal time.

Don't drink intoxicating liquors during business hours or before business hours any day.

Don't misuse privileges.

Don't have private letters sent to your business address.

Don't read papers, letters or books during business hours.

Don't have friends call and see you during business hours.

Don't have friends call you up on the 'phone, and don't call them up on the 'phone during business hours.

Don't indulge in gossip.

Don't use slang phrases about money or anything else.

Don't talk loud or shout from one end of the store to the other.

Don't borrow lead pencils from another clerk and don't loan.

Don't be an eye servant, it is dishonest; be the same in or out of sight.

Don't do anything which you know is wrong, just because you think your manager or superintendent will not discover it.

Don't forget that a good honest record and the name of being a worker is worth as much as your salary, and very often more.

Don't say, "I am not hired to do so-and-so;" always take an interest in anything that is to the firm's interest.

Don't expect an increase in wages if you are a clock-watcher, a fault-finder or always making dissatisfaction among your fellow-employees.

Don't think that everybody is honest; try and stop all leaks in the way of dishonesty.

Don't wait on your own family or yourself; if you buy goods, buy them the same as you do in any other store.

LOCAL AND PERSONAL.

Whitely & Shirlcliffe will open a shop at Kilbourne, Ill.

M. K. Pomeroy has opened a market at Hampden, Me.

Winters & Bone have established a market at Dunmore, Pa.

Fred. and Charles Work have opened a market at Florence, Pa.

Charles W. Blake has established a new shop at Schenectady.

J. L. Lancaster has opened a new shop at Stockton Springs, Me.

E. J. Conchman is completing a new market building at Augusta, N. Y.

Heath's market at Sandersville, Ga., was destroyed by fire last week.

A Philadelphia barber has sued an Atlantic City butcher for \$10,000 damages for alienating his wife's affections. The butcher was arrested and had to give bail.

The E. C. Swift beef establishment on River street, Woonsocket, R. I., is undergoing extensive alterations and when completed the capacity of the local quarters will be greatly enlarged.

Butchers at Youngstown, O., are asking their employers to give them a half holiday each week. The master butchers have offered two full days a season with pay, and the compromise may be accepted.

The California Co-operative Meat Company, started by striking butchers at Oakland, Cal., has received sufficient encouragement to open six retail shops in various sections of the city. It will obtain its meat from an abattoir in a neighboring county.

The Pittston, Pa., butchers' union has elected the following officers for the ensuing year: President, J. J. Howell; vice-president, W. C. Schwab; recording secretary, G. F. Hunter; financial secretary, H. H. Giles; treasurer, George Smith; guard, Charles Boone.

PROTECTING WOOD BY OILING.

The wooden parts of meat delivery wagons being, naturally, exposed to the various influences of changeable seasons and temperatures are very economically protected by painting with oil. Wagon makers and repairers save their stock from worms by oiling with linseed oil. Single trees, double trees, neck yokes, spokes and cross bars that are of white hickory and are kept in stock for a year or more will be eaten by worms if not kept in a dark place or otherwise protected. Coal and kerosene oil are good also, and the expense of applying is but little. Linseed oil is preferable, as it acts to some extent as a wood filler, filling the pores and thus aiding the painting, which follows in its proper place. Some manufacturers oil all their white hickory stock before shipping.

LIQUID DISINFECTANTS.

As the hot season rapidly approaches, it becomes a matter of more than individual importance to review some of the more widely known and economically employed of the large class of chemicals generally known as disinfectants. What is ordinarily meant by a disinfectant for use about the house or shop is a deodorizing antiseptic. Copperas, on account of its cheapness, is most frequently used, and is efficient. It has one especial recommendation in its cheapness. The fault found with it is that it produces rust stains and unsightly discolorations wherever it is used. This does not, however, interfere with its usefulness in stables, outhouses, drains, etc., but is an objectionable feature.

Salts of alumina, especially the sulphate, answer the purpose better for use about the house, but are, of course, somewhat more costly. A strong solution of chloride of zinc, prepared by dissolving scrap zinc, or zinc oxide, to saturation in muriatic acid, is of much greater intrinsic value as a disinfectant, and on the whole is probably the best thing to recommend. The only objection to it is that it is poisonous, and it should never be left lying about without a poison label attached. Among the disinfectants said to be especially useful in destroying foul odors is thymol, which may be most conveniently used in the form of an alcoholic solution, to be employed with a spray apparatus.

PRESERVATIVES FOR EGGS.

Various preparations for preserving eggs for winter use are sold to unsophisticated housewives, and usually at a good profit for the manufacturer. The principle upon which most of such compounds act is that of excreting the air; almost any wax or varnish will serve the purpose. There are two requisites: have the eggs fresh and clean and put them up as late in the season as possible.

One very ancient and universally applied method consists in dipping the eggs into melted wax or paraffin. We append a formula for

preparing a coating solution which duplicates one very extensively sold: Gelatine, one-half ounce; borax, one-eighth of an ounce; water, enough to make ten ounces. Dissolve the gelatine first in the hot water in which the borax has been previously dissolved, and bottle the solution. If too stiff, warm the solution and rub on the eggs, or dip the eggs in the solution.

MARY'S WICKED RAM.

Maid Mary had a hard browed ram, as black as any crow, and everywhere that Mary went the ram was sure to go.

It went with her to Zion church one peaceful Sabbath day, and Mary thought it would behave in a religious way.

She wisely counseled it en route, and begged it to be good, and rammy shook his whiskerettes as if to say he would (not).

A deacon met them at the door, and said it would be a sin to see a wicked beast at church, but rammy butted in!

The deacon got a plexus punch that stretched him on the floor, and the subsequent proceedings interested him no more.

The congregation rubbernecked with widely staring eyes, the superstitious thinking 'twas the devil in disguise.

A sister from her seat arose—she fain would hence depart—but got a chug behind her back, that almost broke her heart.

"I will expel the sinful brute!" cried Brother Pettigrew, but in his midst the rammy's brow was buried p. d. q.

A choir man threw a prayer stool to crush the warlike ram, and landed it with vigor on poor Mary's diaphragm.

The preacher said that kindness would subdue wild beasts and birds, and move toward the waiting pet with soft, endearing words.

Then came a dull and sickening thud! The pastor, where was he? Go ask the sister in whose lap he lit ungracefully.

Then sent they for the butcher boy, who slew the aged ram, and fixed its meat with chemicals, and sold it for spring lamb.—Denver Post.



Tempered and Tested

We guarantee our butchers' tools to stand the hardest kind of work. If they don't, you get your money back.

Every cleaver, chopper, knife, killing axe; in fact, every butchers' tool we make is tempered and severely tested individually.

We know what it means to you for the edge to turn or crack or the handle to bend.

Plumb's Tools

are made to guard against these faults.

If you want a tool you can feel sure of, look for our trade mark.

FAYETTE R. PLUMB, Incorporated,
Philadelphia, Pa., U. S. A.

May be bought of the following:
Koch Butchers' Supply Co., Kansas City, Mo.; Cincinnati Butchers' Supply Co., Cincinnati, O.; G. V. Brecht Butchers' Supply Co., St. Louis, Mo.; Bernard Gloekler, Pittsburg, Pa., and of the leading hardware jobbers.

